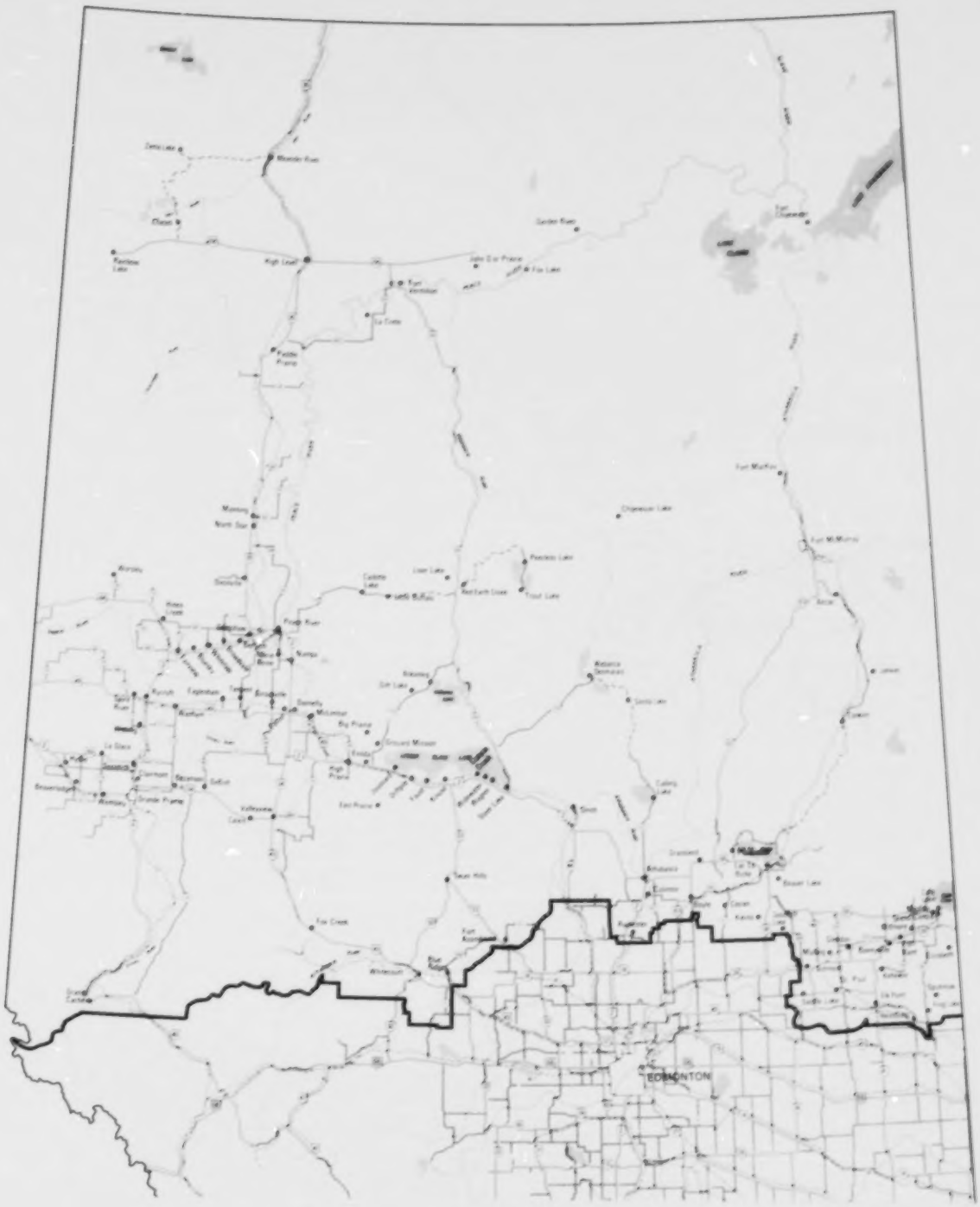
Alberta
NORTHERN ALBERTA
DEVELOPMENT COUNCIL

TRENDS IN NORTHERN ALBERTA

A Statistical Overview
1970-1990



NORTHERN ALBERTA DEVELOPMENT COUNCIL AREA

COMMUNITIES WITH POPULATION OVER 75 (1981 CANADA CENSUS)

PRIMARY HIGHWAY — SECONDARY ROAD - - - - LOC ROAD ..... RAILWAY

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NORTHERN ALBERTA DEVELOPMENT COUNCIL (1989-90)

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The Northern Alberta Development Council is pleased to present this second edition of "Trends in Northern Alberta". Council first compiled statistical data on northern Alberta in 1980, and because northerners have indicated many times that the publication has been a valuable resource tool, it became clear that an updated record is required. This statistical overview for the 1990s covers some of the key trends that have affected northern Alberta over the past 20 years.

This overview consolidates a wide range of statistical data which provide some of the background information to help readers more precisely gauge various economic and social trends in the north.

Those readers wishing more detailed information should contact the Northern Development Branch or the appropriate government department.

Bob Elliott

Bob Elliott, M.L.A.
Chairman

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INTRODUCTION

The Northern Alberta Development Council *Trends* publication is a statistical overview of the NADC region over the years 1971-1989. The intent of the publication is to present a wide variety of information relating to northern Alberta and identify relevant trends arising over the past 20 years.

This publication has been segmented into four categories following the introduction, each reflecting a significant element of northern Alberta.

Section I: Population and Demographics discusses population and demographic trends using population breakdowns and vital statistics information.

Section II: Socio-economic Characteristics identifies relevant socio-economic trends in the NADC area and provides information on income, labor force, education, health, family and social services, and justice.

Section III: Infrastructure and Services, presents statistical data related to utilities, housing, transportation and communications.

Section IV: Economic Development outlines trend data related to economic development issues by sector such as industrial development, manufacturing/retail/service trades, agriculture, oil and gas, forestry, fishing/trapping/wildlife, mining and tourism/culture/recreation.

Most of the data were collected for locations within the NADC area. However, in many cases data were available only for regions with boundaries that were incompletely enclosed within the NADC area boundary, or were collected in dissimilar categories across sources. Where the former has occurred, data were organized to most closely match geographic boundaries and the area referred to as "Northern Alberta" or "The Northern Region". In both cases, the comparability of data is noted where appropriate.

Data gathered from the Alberta Statistical Information System (ASIST) have been adjusted to the NADC boundary by excluding municipalities in Census Divisions 12 and 13 that are not within the NADC area. Two municipalities lying outside the NADC boundary were not excluded: Castle Island (population 5) and the Alexis Indian Reserve (population 511), the former because of its small size, and the latter because it is not monitored by ASIST.

In some cases, the totals for table categories do not match the sum of all values for those categories due to minor rounding errors in data sources. As well, where data are unavailable for several table categories for a particular year, the aggregate for that year is indicated as not available. Note that if only a few categories lack data, the aggregate is calculated using the available data and may not be directly comparable to aggregates calculated for full data sets.

By providing a wide cross-section of information on the NADC area, it is hoped that the reader of this publication can develop a general understanding of northern Alberta and its evolution over the past two decades. In addition, the statistical trend data should enable the reader to more precisely anticipate future economic and social conditions.

Most chapters present their data in each of three formats: a written summary, one or more graphic representations of particularly noteworthy data trends, and several detailed tables. To more clearly understand the data presented, footnotes indicate their sources and limitations. Complete source references can be found at the end of this publication.

NOTES

Abbreviations and Formulae

ASIST	Alberta Statistical Information SysTems
CD	Census Division
CO	County
deca	hundred
giga	billion
km	kilometre
MD	Municipal District
NA	Not Available
NADC	Northern Alberta Development Council

Annual Change:

$$\left(\frac{X_2 - X_1}{X_1} \right) \times 100 = A$$

where X_1 is data in Year *1*;
X_2 is data in Year *2*

Average Annual Change is calculated for data reported over intervals wider than one year, often in cases where data is not available for every year from 1971 to 1989. For example, change from Year *a* to Year *b* is *c* years.

$$\left(\left[\left(\frac{X_b}{X_a} \right)^{(1/c)} \right] - 1 \right) \times 100$$

where X_b is data for Year *b*
X_a is data for Year *a*
c is that interval in years

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POPULATION AND AREA

Introduction

Population centres have been classified on the basis of their municipal status as of December 1988. Centres which have changed status from 1971 to 1988 are noted in Table A2. In addition, Indian Reserve and Metis Settlement populations are excluded from the NADC area population totals for Tables A1 and A2, but are included in the totals for Table A3.

A1 Population by Type of Municipality

Population Increase, 1971 to 1988	%
Alberta	47
NADC Area	55
Cities	209
Towns	59
Villages and Summer Villages	42
Counties	22
IDs	20
MDs	-6

In 1988, 26 percent and 32 percent of the NADC area population were in cities and towns, respectively.

A2 Population by Municipality

Increase in population, 1971 to 1988	%
Fort McMurray	410
Slave Lake	173
Cold Lake	163
Bonnyville	116
Grande Prairie	104
Whitecourt	89
Grande Prairie County	38
Peace River	26
St. Paul	23
ID 18	19
ID 17	11
MD 87 Bonnyville	-0.1

This representative sample illustrates that the move to urban centres continues to outpace the move to the rural municipalities.

A3 Population by Census Division

As indicated in the introduction, since published data are not always available for the NADC area, many of the tables in this publication refer to census divisions (CDs) in Alberta. Because of changes in the census division boundaries in 1986, the NADC area now encompasses part of CD 12, part of CD 13 as well as CDs 16, 17, 18 and 19. The area previously included parts of the old census divisions 12 and 13 and all of CD 15. The difference between the full census division totals and the NADC portion of each census division should be borne in mind when interpreting subsequent tables.

Proportion of Alberta Population in NADC Area	%
1971	9.7
1986	10.2

Population of CDs 12 and 13 outside the NADC Area	% of NADC Area
1971	22
1986	17

A4 Metis Settlement Population and Area

All the province's eight Metis settlements lie within the NADC area on a total of 505 210 hectares.

Population Increase, 1971 to 1986	%
NADC Area	71
Paddle Prairie	204
Buffalo Lake	67
Kikino	50

Paddle Prairie is the largest settlement, with a population of 1,087 and an area of 163 169 hectares in 1986.

A5 Resident Native Population and Area

Within the NADC boundary there are 24 Native Bands with lands that have a combined 1986 population of 13,503.

Population Increase from 1971 to 1986	%
Alberta	17
NADC Area	17
Dene Tha	96
Little Red River	60
Saddle Lake	20
Bigstone Cree	15

The Saddle Lake reserve is the largest, with a 1986 population of 3,126. Bigstone Cree and Little Red River are the next largest reserves, with populations of 1,583 and 1,530, respectively. The areas for the aforementioned reserves are 30 328, 21 171 and 24 482 hectares respectively.

Summary

The rate of population increase for the NADC area from 1971 to 1986 (55 percent) has been greater than that of the province (47 percent). Within the NADC area, the largest growth has occurred within the cities and towns, while growth in the rural municipalities has remained relatively stable. All the Metis settlements in Alberta are within the NADC boundary. The population growth of these settlements from 1971 to 1986 was 71 percent, while the growth of the Indian Reserves in the NADC Area and Alberta was only 17 percent.

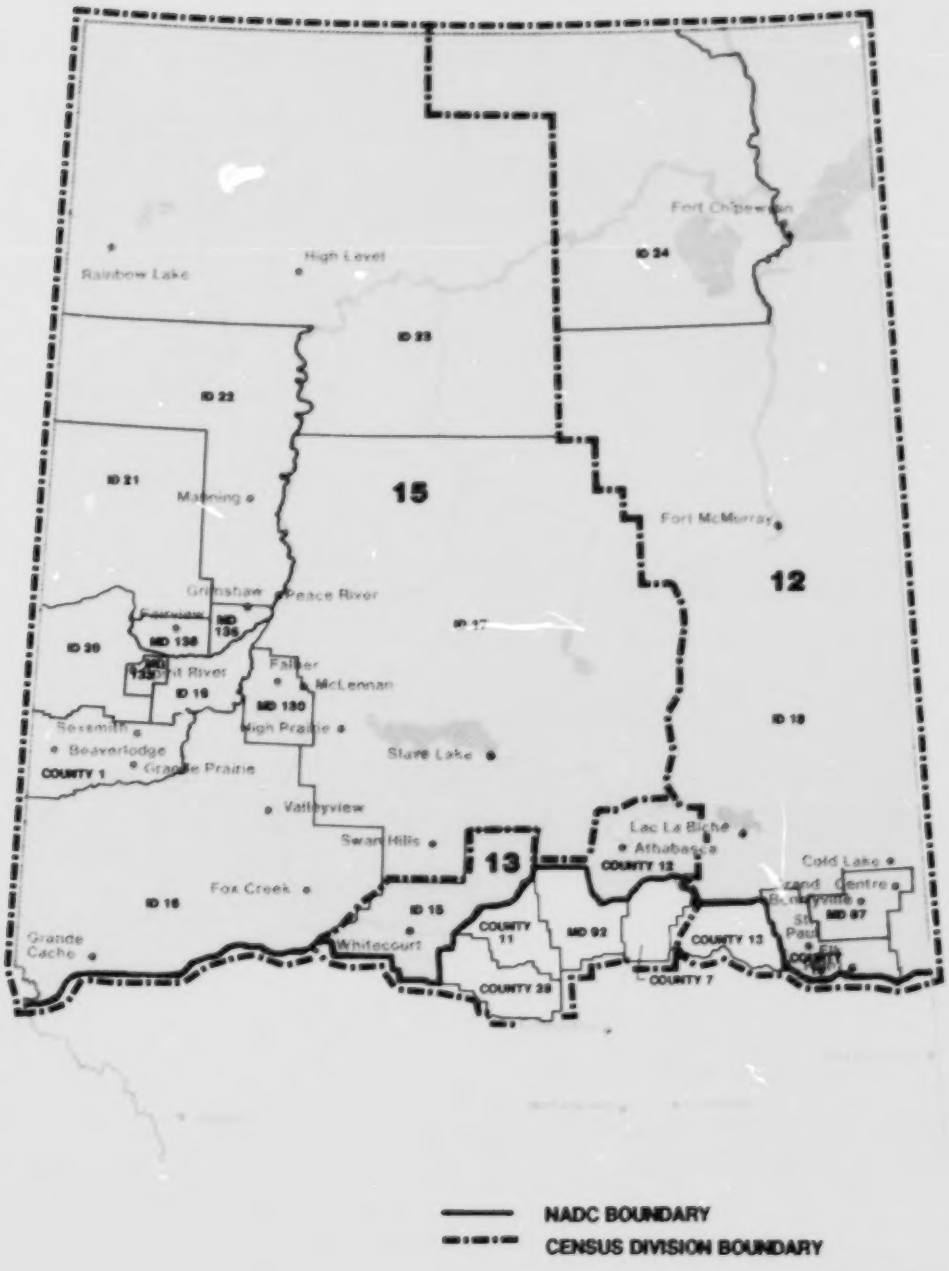


Figure A1

Census Divisions (1981) for the NADC Area

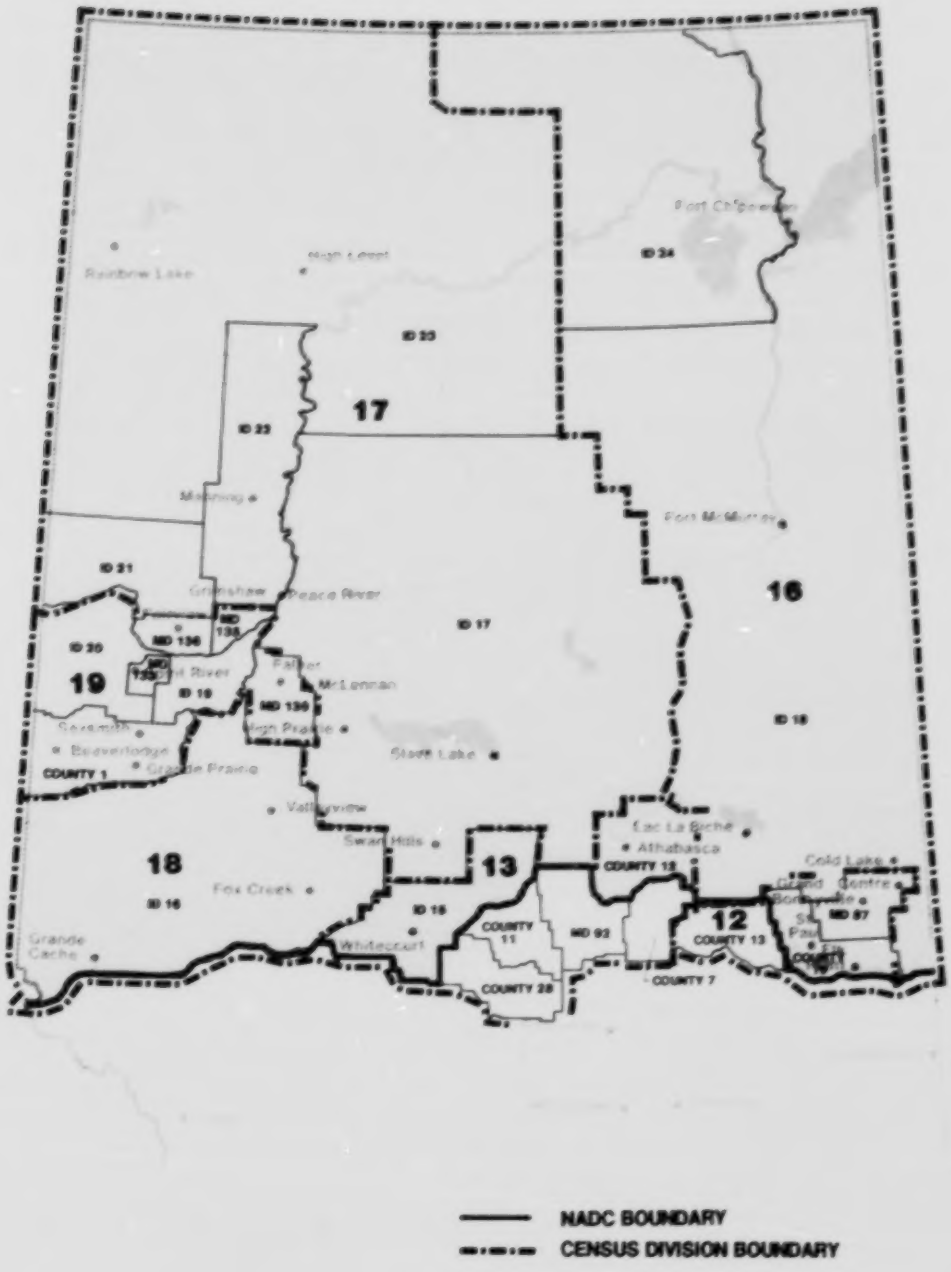


Figure A2

Census Divisions (1986) for the NADC Area

Figure A3

Population by Type of Municipality for the NADC Area

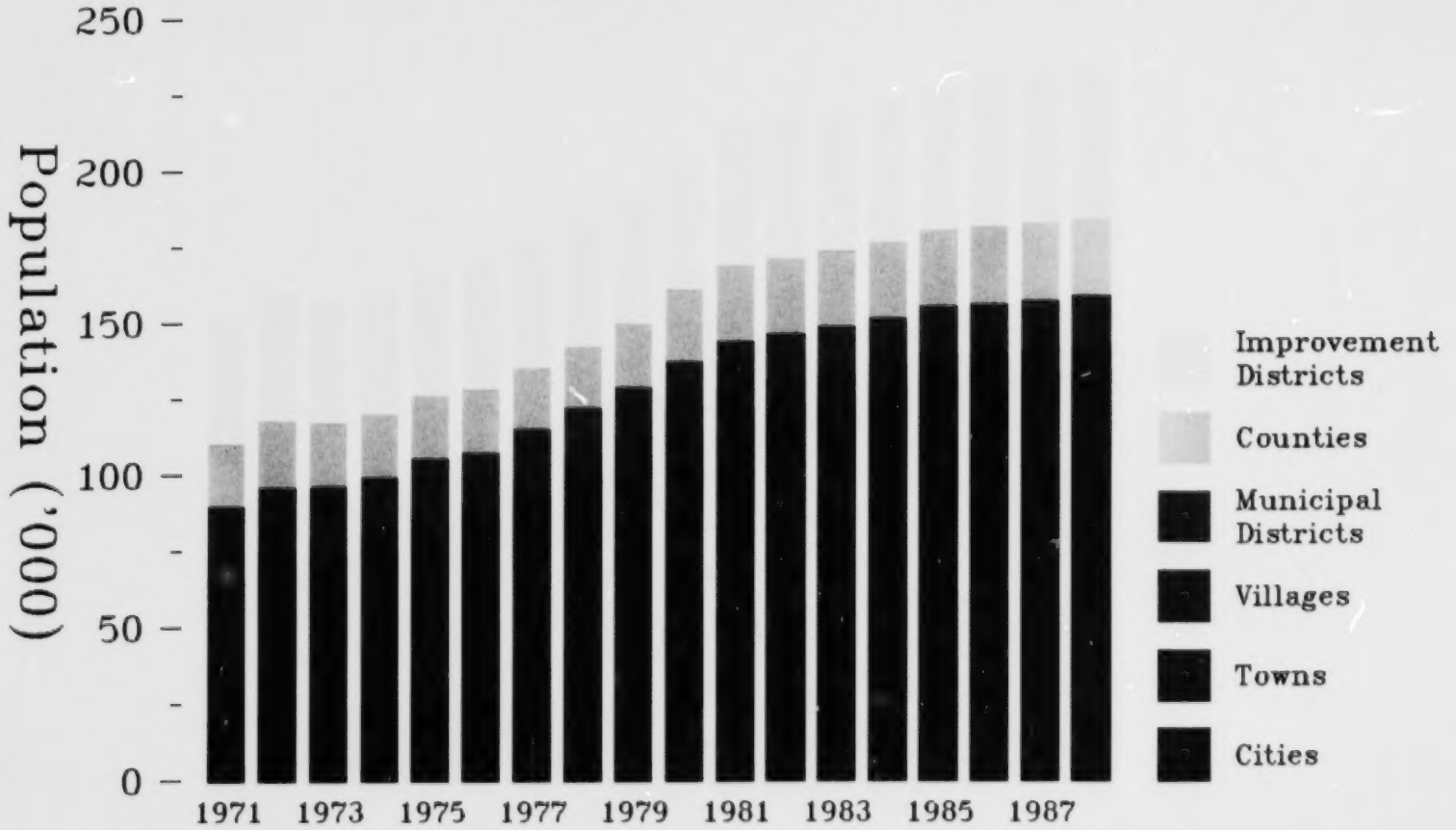


Figure A4

Annual Population Change

TABLE A1
Population
by Type of Municipality

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NADC AREA																		
Cities	19 926	20 591	22 887	24 901	30 011	33 050	37 999	43 009	46 229	50 502	55 263	57 839	58 570	59 763	61 866	61 420	61 420	61 597
Towns	46 797	49 562	51 419	51 514	53 881	53 344	55 612	57 564	61 245	65 044	67 328	67 266	68 535	70 006	71 675	72 173	73 429	74 540
Villages & Summer Villages	4 725	4 918	4 895	4 806	4 929	4 943	5 090	5 280	5 431	5 731	5 874	6 074	6 299	6 563	6 665	6 547	6 625	6 708
Municipal Districts	18 679	21 362	17 823	18 679	17 329	16 955	16 980	16 980	17 066	17 145	16 565	16 565	16 565	16 567	16 966	17 515	17 515	17 515
Counties	20 179	21 554	20 179	20 179	20 179	19 996	19 996	19 996	20 269	22 648	24 125	24 153	24 153	24 366	24 339	24 616	24 616	24 616
Improvement Districts	41 936	43 722	41 891	41 891	41 891	42 658	42 658	42 658	42 972	43 002	47 292	47 292	47 335	47 333	48 403	50 427	50 427	50 427
TOTAL	152 242	161 709	159 094	161 970	168 220	170 946	178 335	185 487	193 212	204 072	216 447	219 189	221 457	224 600	229 914	232 698	234 032	235 403
ANNUAL CHANGE (%)		6.2	-1.6	1.8	3.9	1.6	4.3	4.0	4.2	5.6	6.1	1.3	1.0	1.4	2.4	1.2	0.6	0.6
ALBERTA	1 627 900	1 657 300	1 689 500	1 722 400	1 778 300	1 838 000	1 912 700	1 983 100	2 052 800	2 140 600	2 237 300	2 314 500	2 338 700	2 338 500	2 348 500	2 375 100	2 377 700	2 395 200
ANNUAL CHANGE (%)		1.8	1.9	1.9	3.2	3.4	4.1	3.7	3.5	4.3	4.5	3.5	1.0	0.0	0.4	1.1	0.1	0.7
NADC AREA AS % OF ALBERTA	9.4	9.8	9.4	9.4	9.5	9.3	9.3	9.4	9.4	9.5	9.7	9.5	9.5	9.6	9.8	9.8	9.8	9.8

SOURCE:
- Census of Canada (1971,1976,1981,1986), Alberta Municipal Affairs for all other years

NOTES:
- Population centres are classified by municipal status as of December 1988.
- Indian Reserves and Metis Settlements are excluded from the NADC Area totals.

TABLE A2
Population by Municipality

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NADC AREA																		
CITIES																		
Fort McMurray *	6 847	7 147	8 148	9 542	13 393	15 424	20 373	24 580	25 802	27 784	31 000	33 576	34 494	35 352	38 810	34 949	34 949	34 949
Grande Prairie	13 079	13 444	14 739	15 359	16 618	17 626	17 626	18 429	20 427	22 718	24 263	24 263	24 076	24 411	25 036	26 471	26 471	26 648
TOTAL	19 926	20 591	22 887	24 901	30 011	33 050	37 999	43 009	46 229	50 502	55 263	57 839	58 570	59 763	61 846	61 420	61 420	61 597
TOWNS																		
Athabasca	1 765	1 831	1 831	1 831	1 756	1 759	1 759	1 838	1 878	1 846	1 731	1 731	1 862	1 862	1 933	1 970	1 970	1 975
Beaverlodge	1 157	1 138	1 245	1 245	1 337	1 332	1 366	1 366	1 643	1 847	1 937	1 937	1 937	1 937	1 937	1 808	1 808	1 808
Bonnyville	2 587	2 588	2 588	*2 658*	*2 860*	*2 885*	*2 938*	*3 135*	*3 669*	4 256	4 454	4 454	4 664	4 786	5 223	5 470	5 575	5 575
Cold Lake	1 309	1 242	1 309	1 309	1 309	1 317	1 317	1 317	1 585	1 642	2 110	2 058	2 245	2 515	2 805	3 195	3 189	3 445
Elk Point	729	771	782	780	814	807	890	952	1 012	1 041	1 022	1 051	1 057	1 113	1 208	1 318	1 300	1 391
Fairview	2 109	2 093	2 359	2 359	2 538	2 248	2 594	2 594	3 027	3 027	2 869	2 869	2 869	3 234	3 234	2 998	3 281	3 281
Falher	918	971	918	942	1 061	1 120	1 153	1 153	1 162	1 162	1 102	1 204	1 204	1 188	1 188	1 178	1 178	1 178
Fox Creek *	1 625	1 765	1 811	1 569	1 569	1 625	1 765	1 811	1 811	1 905	1 978	1 978	1 978	1 978	1 978	2 068	2 068	2 068
Grand Centre	2 088	2 380	2 600	2 673	2 912	2 780	2 780	2 780	2 829	3 107	3 146	3 146	3 119	3 195	3 506	3 655	3 655	3 655
Grande Cache *	2 525	3 417	3 580	2 906	3 457	4 116	4 423	4 423	4 423	4 423	4 523	4 624	4 624	4 624	4 624	3 646	3 646	3 646
Grimshaw	1 714	1 747	1 747	1 747	1 747	1 665	1 677	1 806	1 950	2 209	2 316	2 488	2 488	2 488	2 645	2 579	2 579	2 625
High Level *	1 614	1 621	1 621	1 621	1 621	1 621	1 830	2 043	2 043	2 134	3 294	2 354	2 673	2 806	2 852	3 004	3 004	3 004
High Prairie	2 354	2 650	2 698	2 698	2 698	2 281	2 281	2 281	2 281	2 281	2 506	2 506	2 580	2 580	2 580	2 817	2 817	2 817
Lac La Biche	1 791	1 743	1 743	1 900	1 964	1 954	1 954	1 954	1 991	2 035	2 007	2 069	2 069	2 242	2 242	2 553	2 553	2 553
Manning	1 071	1 204	1 204	1 204	1 234	1 050	1 140	1 140	1 140	1 166	1 173	1 262	1 262	1 262	1 262	1 144	1 144	1 144
McLennan	1 090	1 157	1 090	1 130	1 204	1 133	1 212	1 212	1 212	1 212	1 125	1 176	1 176	1 176	1 176	993	993	1 021
Peace River	5 039	5 071	5 071	5 071	5 071	4 840	5 044	5 235	5 692	5 754	5 907	6 043	6 043	6 043	6 043	6 288	6 355	6 355
Rainbow Lake *	355	580	563	563	607	434	434	806	806	813	504	739	847	856	1 004	675	1 043	1 146
Sexsmith	559	491	622	622	790	770	912	937	1 064	1 141	1 180	1 184	1 184	1 192	1 192	1 256	1 256	1 256
Slave Lake	2 052	2 166	2 836	3 240	3 449	3 561	3 561	3 561	3 821	4 328	4 506	4 562	4 562	4 838	4 838	5 429	5 538	5 611
Spirit River	1 091	1 130	1 160	1 160	1 160	1 020	1 020	1 020	1 020	1 107	1 104	1 104	1 104	1 104	1 104	1 086	1 086	1 086
St. Paul	4 161	4 131	4 187	4 225	4 303	4 337	4 474	4 509	4 710	5 066	4 884	4 884	4 963	4 963	5 052	5 030	5 128	5 128
Swan Hills	1 376	1 804	2 038	2 169	2 197	2 012	2 206	2 351	2 553	2 553	2 497	2 497	2 497	2 497	2 497	2 403	2 403	2 407
Valleyview	1 708	1 849	1 708	1 708	1 643	1 716	1 716	1 716	1 716	2 066	2 061	2 061	2 232	2 232	2 232	1 987	2 218	2 218
Wembley	348	360	360	360	510	507	507	608	835	1 119	1 169	1 209	1 209	1 209	1 209	1 208	1 227	1 227
Whitecourt	3 662	3 662	3 748	3 824	4 070	4 454	4 659	5 016	5 370	5 804	6 223	6 076	6 087	6 088	6 111	6 415	6 415	6 920
TOTAL	46 797	49 562	51 419	51 514	53 881	53 344	55 612	57 564	61 245	65 044	67 328	67 266	68 535	70 006	71 675	72 173	73 429	74 540

TABLE A2
Population by Municipality

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
VILLAGES																		
Boyle	460	507	518	518	521	576	603	616	612	651	638	668	679	678	703	678	678	704
Berwyn	474	470	470	414	432	433	463	475	521	534	557	632	674	674	674	661	661	661
Donnelly	274	292	292	292	288	278	312	312	340	340	336	362	382	382	407	405	405	405
Eaglesham	229	229	229	218	237	229	229	229	229	229	208	207	207	201	201	197	191	191
Fort Assiniboine	173	180	180	180	195	185	185	182	182	194	207	191	217	214	214	214	214	214
Girouxville	347	305	347	328	328	303	315	315	315	315	325	325	325	325	325	367	367	367
Glendon	354	350	354	354	411	370	370	431	431	454	430	455	455	455	471	480	480	480
Hines Creek	438	428	521	521	521	503	503	503	503	527	575	575	529	529	529	513	513	513
Hythe	487	480	526	526	465	460	504	504	504	680	639	681	681	681	681	673	688	688
Kinuso	267	376	267	275	290	305	305	305	305	305	285	285	285	285	285	282	282	282
Nampa	283	317	263	252	252	286	286	352	352	352	334	334	334	435	435	464	464	464
Plamondon	189	190	190	190	215	228	228	228	236	236	259	271	271	271	271	236	236	236
Rycroft	461	528	461	461	497	533	533	538	538	538	649	649	649	734	734	672	672	672
Wanham	268	256	256	256	256	225	225	225	233	233	266	266	266	266	266	233	238	238
TOTAL	4 704	4 908	4 874	4 785	4 908	4 914	5 061	5 215	5 301	5 588	5 708	5 901	5 954	6 130	6 196	6 075	6 089	6 115
SUMMER VILLAGES																		
Bondiss *													40	40	44	51	55	59
Bonnyville Beach	1	1	1	1	1	7	7	7	38	45	45	44	43	60	60	60	63	62
Island Lake South *													34	42	43	41	56	62
Island Lake	20	9	20	20	20	22	22	22	37	37	43	43	43	81	81	89	89	126
Mewatha Beach *								15	15	15	27	27	27	27	27	28	28	28
Pelican Narrows *									19	25	29	35	42	52	65	55	78	87
South Baptiste *													47	47	65	66	66	68
Sunset Beach *								21	21	21	22	24	24	36	36	38	38	38
West Baptiste *													17	19	17	19	22	22
Whispering Hills *													10	11	13	18	26	26
White Gull *													18	18	18	7	15	15
TOTAL	21	10	21	21	21	29	29	65	130	143	166	173	345	433	469	472	536	593
MUNICIPAL DISTRICTS (MD)																		
87 Bonnyville	10 935	12 750	10 079	10 935	9 381	9 837	9 837	9 837	9 837	9 916	9 407	9 407	9 407	9 409	9 808	10 384	10 384	10 384
130 Smoky River	3 453	3 984	3 453	3 453	3 453	2 948	2 948	2 948	2 990	2 990	2 858	2 858	2 858	2 858	2 858	2 853	2 853	2 853
133 Spirit River	1 052	1 243	1 052	1 052	1 052	857	857	857	857	857	891	891	891	891	891	848	848	848
135 Peace	1 624	1 640	1 624	1 624	1 624	1 583	1 583	1 583	1 583	1 583	1 520	1 520	1 520	1 520	1 520	1 527	1 527	1 527
136 Fairview	1 615	1 745	1 615	1 615	1 819	1 730	1 755	1 755	1 799	1 799	1 889	1 889	1 889	1 889	1 889	1 903	1 903	1 903
TOTAL	18 679	21 362	17 823	18 679	17 329	16 955	16 980	16 980	17 066	17 145	16 565	16 565	16 565	16 567	16 966	17 515	17 515	17 515
COUNTIES (CO)																		
[1] Grande Prairie	8 723	8 697	8 723	8 723	8 723	9 147	9 147	9 147	9 147	11 269	12 078	12 078	12 078	12 078	12 078	12 042	12 042	12 042
12 Athabasca	5 611	6 147	5 611	5 611	5 611	5 406	5 406	5 406	5 406	5 406	5 974	5 974	5 974	5 936	5 936	5 979	5 979	5 979
19 St. Paul	5 845	6 710	5 845	5 845	5 845	5 443	5 443	5 443	5 716	5 973	6 073	6 101	6 101	6 352	6 325	6 595	6 595	6 595
TOTAL	20 179	21 554	20 179	20 179	20 179	19 996	19 996	19 996	20 269	22 648	24 125	24 153	24 153	24 366	24 339	24 616	24 616	24 616

TABLE A2
Population by Municipality

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
IMPROVEMENT DISTRICTS (ID)																		
15	1 954	2 086	1 954	1 954	1 954	2 214	2 214	2 214	2 214	2 214	2 670	2 670	2 670	2 670	2 670	2 854	2 854	2 854
16	4 215	3 718	4 215	4 215	4 215	4 561	4 561	4 561	4 561	4 561	5 350	5 350	5 350	5 350	5 350	5 332	5 332	5 332
17	11 278	11 800	11 278	11 278	11 278	11 145	11 145	11 145	11 209	11 222	11 699	11 699	11 699	11 699	12 041	12 534	12 534	12 534
18	8 816	9 199	8 816	8 816	8 816	8 511	8 511	8 511	8 669	8 641	9 605	9 605	9 605	9 605	9 605	10 498	10 498	10 498
19	2 155	2 353	2 155	2 155	2 155	1 816	1 816	1 816	1 816	1 816	1 757	1 757	1 757	1 757	1 757	1 620	1 620	1 620
20	2 730	2 792	2 730	2 730	2 730	2 667	2 667	2 667	2 667	2 689	3 000	3 000	3 000	3 000	3 000	2 922	2 922	2 922
21	3 160	3 379	3 160	3 160	3 160	2 648	2 648	2 648	2 648	2 648	2 936	2 936	2 979	2 979	2 979	2 992	2 992	2 992
22	3 209	3 203	3 209	3 209	3 209	3 132	3 132	3 132	3 132	3 132	4 250	4 250	4 250	4 250	4 250	4 451	4 451	4 451
23	4 188	4 961	4 188	4 188	4 188	5 765	5 765	5 765	5 857	5 880	5 837	5 837	5 837	5 837	6 563	6 942	6 942	6 942
24 Wood Buffalo	231	231	186	186	186	199	199	199	199	199	188	188	188	188	188	282	282	282
TOTAL	41 936	43 722	41 891	41 891	41 891	42 658	42 658	42 658	42 972	43 002	47 292	47 292	47 335	47 335	48 403	50 427	50 427	50 427
TOTAL	152 242	161 709	159 094	161 970	168 220	170 946	178 335	185 487	193 212	204 072	216 447	219 189	221 457	224 600	229 914	232 698	234 032	235 403
ANNUAL CHANGE (%)		6.2	-1.6	1.8	3.9	1.6	4.3	4.0	4.2	5.6	6.1	1.3	1.0	1.4	2.4	1.2	1.8	0.6
ALBERTA	1 627 900	1 657 300	1 689 500	1 722 400	1 778 300	1 838 000	1 912 700	1 983 100	2 052 800	2 140 600	2 237 300	2 314 500	2 338 700	2 338 500	2 348 500	2 375 100	2 377 700	2 395 200
ANNUAL CHANGE (%)		1.8	1.9	1.9	3.2	3.4	4.1	3.7	3.5	4.3	4.5	3.5	1.0	0.0	0.4	1.1	0.1	0.7
NADC AREA AS % OF ALBERTA	9.4	9.8	9.4	9.4	9.5	9.3	9.3	9.4	9.4	9.5	9.7	9.5	9.5	9.6	9.8	9.8	9.8	9.8

SOURCE:
- Census of Canada (1971,1976,1981,1986), Alberta Municipal Affairs for all other years

NOTES:
- Population centres are classified by municipal status as of December 1988.
- Municipalities with a * have changed municipal status since 1971.
- Indian Reserves and Metis Settlements are excluded from the NADC area totals.

TABLE A3
Population
by Census Division (CD)

	1971	1976	1981	1986
NADC AREA				
CD 12 (new)				39 382
CD 12 (old)	49 681	58 339	79 506	
CD 13	13 185	15 916	17 413	18 353
CD 15 (old)	94 760	106 993	128 639	
CD 16				48 779
CD 17				48 852
CD 18				13 587
CD 19				72 997
TOTAL	157 626	181 248	225 558	241 950
AVERAGE ANNUAL CHANGE (%)		2.8	4.5	1.4
OUTSIDE NADC AREA				
CD 12 (new)				4 525
CD 12 (old)	4 959	4 790	4 715	
CD 13	30 600	32 422	36 288	36 620
TOTAL	35 559	37 212	41 003	41 145
ALL CENSUS DIVISIONS				
CD 12 (new)				43 907
CD 12 (old)	54 640	63 129	84 221	
CD 13	43 785	48 338	53 701	54 973
CD 15 (old)	94 760	106 993	128 639	
CD 16				48 779
CD 17				48 852
CD 18				13 587
CD 19				72 997
TOTAL	193 185	218 460	266 561	283 095
ALBERTA	1 627 900	1 838 000	2 237 300	2 375 100
AVERAGE ANNUAL CHANGE (%)		2.5	4.0	1.2
NADC AREA AS % OF ALBERTA	**9.7**	**9.9**	**10.1**	**10.2**

SOURCE:
- Census of Canada, 1971 to 1986

NOTES:
- Census Divisions 12 and 13 extend beyond the NADC area boundary.
- New Census Division boundaries were added in 1986.
- Totals for the NADC area and Alberta include Indian Reserves and Metis Settlements.
- 1986 Alberta data estimate the population of Indian Reserves due to incomplete enumeration.

TABLE A4
Metis Settlement Population and Area
(Hectares)

	POPULATION																AREA
	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1988
NADC AREA																	
Buffalo Lake	485	536	503	458	434	442	456	461	522	477	574	498	655	NA	679	809	34 803
East Prairie	259	322	256	277	277	274	287	272	287	271	307	298	336	NA	357	402	32 634
Elizabeth	291	308	272	227	234	246	244	278	253	299	348	363	416	NA	521	550	25 900
Fishing Lake	336	300	253	270	383	309	322	325	287	322	452	357	325	NA	501	532	37 636
Gift Lake	401	472	494	470	573	473	518	512	514	461	604	447	482	NA	552	552	83 916
Kikino	564	583	598	576	542	499	504	559	533	571	699	582	671	NA	815	844	44 920
Paddle Prairie	358	349	376	375	408	542	438	449	472	534	571	644	644	NA	1048	1087	163 169
Peavine	329	353	315	283	320	261	251	253	249	269	313	284	294	NA	347	388	82 232
TOTAL	3 023	3 223	3 067	2 936	3 171	3 046	3 020	3 109	3 117	3 204	3 868	3 473	3 823	NA	4 820	5 164	505 210
ANNUAL CHANGE (%)		6.6	-4.8	-4.3	8.0	-3.9	-0.9	2.9	0.3	2.8	20.7	-10.2	10.1	NA	NA	7.1	
ALBERTA	3 023	3 223	3 067	2 936	3 171	3 046	3 020	3 109	3 117	3 204	3 868	3 473	3 823	NA	4 820	5 164	505 210
ANNUAL CHANGE (%)		6.6	-4.8	-4.3	8.0	-3.9	-0.9	2.9	0.3	2.8	20.7	-10.2	10.1	NA	NA	7.1	
NADC AREA AS % OF ALBERTA	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	NA	100.0	100.0	100.0

SOURCE:
- Alberta Municipal Affairs, Metis Development Branch

NOTES:
- 1984 population not available.
- The area of Metis Settlements in Alberta has not changed since 1979.
- Peavine and Buffalo Lake were previously named Big Prairie and Caslan, respectively.

TABLE A5
Resident Native Reserve Population and Area by Band
(Hectares)

	POPULATION				AREA
	1971	1976	1981	1986	1988
NADC AREA					
Beaver Lake	208	133	188	243	6 148
Bigstone Cree	1 369	1 163	1 289	1 583	21 171
Boyer River	270	217	212	212	7 078
Cold Lake	860	651	651	712	18 702
Dene Tha	654	1 144	1 191	1 285	30 050
Driftpile	511	351	390	469	6 351
Duncan	47	37	34	45	2 427
Fort Chipewyan	239	172	186	192	21 214
Fort McKay	180	146	129	156	5 451
Fort McMurray	98	35	35	102	3 225
Frog Lake	627	638	678	779	18 853
Grouard	56	18	43	55	441
Heart Lake	80	53	59	68	4 498
Horse Lake	113	77	105	137	3 100
Janvier	200	152	165	201	1 633
Kehewin	504	431	555	736	8 203
Little Red River	954	1 122	1 215	1 530	24 482
Saddle Lake	2 613	2 375	2 696	3 126	30 328
Sawridge	38	35	25	18	2 144
Sturgeon Lake	651	471	531	551	9 061
Sucker Creek	482	296	257	349	5 989
Swan River	150	95	119	143	4 321
Tallcree	213	129	161	283	3 727
Whitefish Lake	472	386	439	528	4 848
TOTAL	11 589	10 327	11 353	13 503	243 445
AVERAGE ANNUAL CHANGE (%)		-2.3	1.9	3.5	
ALBERTA	29 889	25 645	28 762	35 030	657 610
AVERAGE ANNUAL CHANGE (%)		-3.0	2.3	4.0	
NADC AREA AS % OF ALBERTA	**38.8**	**40.3**	**39.5**	**38.5**	**37.0**

SOURCE:
– Department of Indian and Northern Affairs: Lands, Revenue and Taxation Branch

NOTES:
- 1976 to 1986 population figures include band members living on a reserve (own band or another band), as well as on crown land.
- 1971 population figures include all band members living in all jurisdictions.
- Reserve areas have not changed since 1979.
- The Fort Chipewyan total includes only Chipewyan Indians (no Cree).
- Alberta is in the process of transferring approximately 4 560 hectares of land to the Woodland Cree near Fort Chipewyan.

VITAL STATISTICS

Introduction

The baby boom "bubble" is reflected in the population for different age groups in the NADC area. The 25 to 34 age range is the fastest-growing while the younger age groups are slowest. Another important statistic is the rapid growth of single-parent families and the growing number of couples without children. Finally, the number of anglophones in the NADC area has increased substantially while the number of francophones has dropped.

B1 Population by Age Group and Gender

Highlights

- Population statistics for the NADC area by specified age groups indicate a decrease in the 10-24 age range between 1981 and 1986 for both males and females with an increase in the remaining age categories. This mirrors the Alberta average and reflects the aging of the post-war baby boom generation.
- The NADC area contains a larger number of males than females, a trend reflected in the Alberta average.
- In the ten-year span from 1976 to 1986, the largest increase (77 percent) in NADC area population was seen in the 25-34 age range and a 2 percent decline was found in the 10-14 range.

B2 Family Status by Family Type

Highlights

- There was a greater increase in the number of families in the NADC area than in Alberta. The total percentage increase in families from 1976 to 1986 was 46 percent in the NADC area as compared to 37 percent for the province.
- The proportion of families headed by a single parent was less in the NADC area than in the province in 1986. However, the percentage of single-parent families in the NADC area has increased by almost 96 percent from 1976 to 1986.
- The number of childless families increased 60 percent from 1976 to 1986 in the NADC area as compared to 49 percent in the province.

B3 Mother Tongue

Highlights

- Of the 241,950 residents in the NADC area in 1986, 77 percent used English as their mother tongue, 6 percent used French and 17 percent used another language.
- Although the percentage of French-speaking residents is relatively low within the NADC region, their numbers represented almost 30 percent of the total population of francophones in the province in 1986.
- From 1976 to 1986, the number of anglophones in the NADC area increased 40 percent, while the number of francophones declined 2 percent.

B4 Religious Status

Highlights

- In 1981, 49 percent of the residents in the northern region were of the Protestant religion and 36 percent were of the Catholic faith.
- While the growth in Protestant and Catholic denominations has been relatively steady, the largest increase has been seen in respondents citing no religious preference (170 percent total increase from 1971 to 1981) and members of other religious sects (160 percent increase from 1971 to 1981).

B5 Vital Statistics

Highlights

- Birth rates in the NADC area reached a peak in 1985 (5,515) and then declined 4 percent to a total of 5,281 in 1986.
- Deaths in the area reached a peak in 1986 with a total of 1,212.
- The number of marriages in the NADC area reached a peak in 1981 (1,884) and then declined 18 percent to 1,539 by 1986.

B6 Causes of Death

Highlights

- The leading cause of death in the NADC area in 1988 was circulatory disease (37 percent), which is also the most frequent cause in the province (39 percent).
- In 1988 deaths caused by accidents and poisonings were more common in the northern region than Alberta as a whole, and contributed to almost 13 percent of the provincial total.
- The number of deaths from all causes in the NADC area decreased from 1982 to 1988 with the exception of neoplasms (tumors and cancers).

B7 Mobility Status

Mobility status refers to the number of individuals moving into the northern region, as classified by originating location. A number of trends are evident over the past fifteen years, the majority of which reflect those seen province-wide. Since 1971, the number of non-migrants, or individuals moving within their own census division, has decreased by more than 50 percent, while the number of migrants, or individuals moving to the region from another CD, province or country, has increased 40 percent.

Figure B1

Population by Age Group

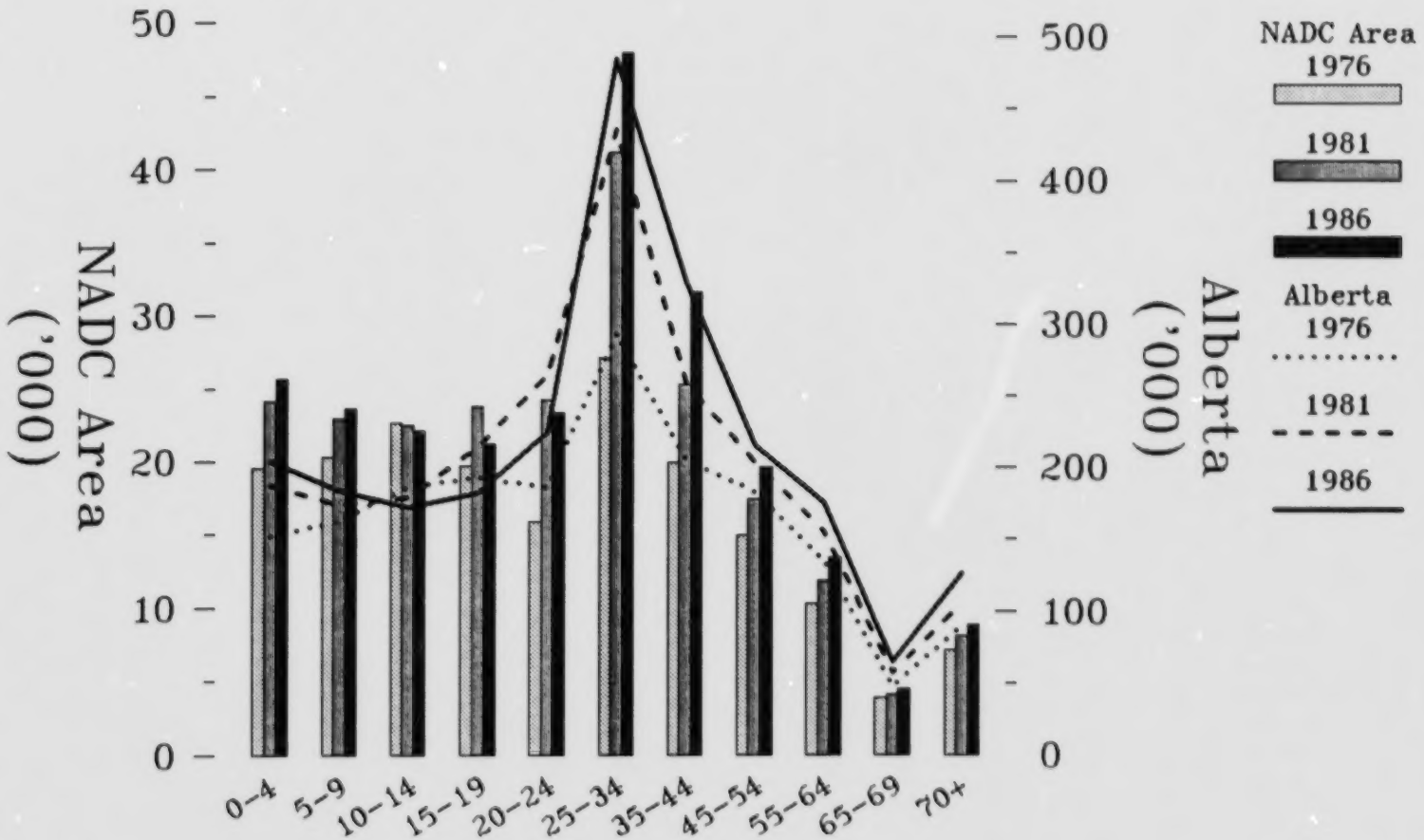


Figure B2

Population by Gender for the NADC Area

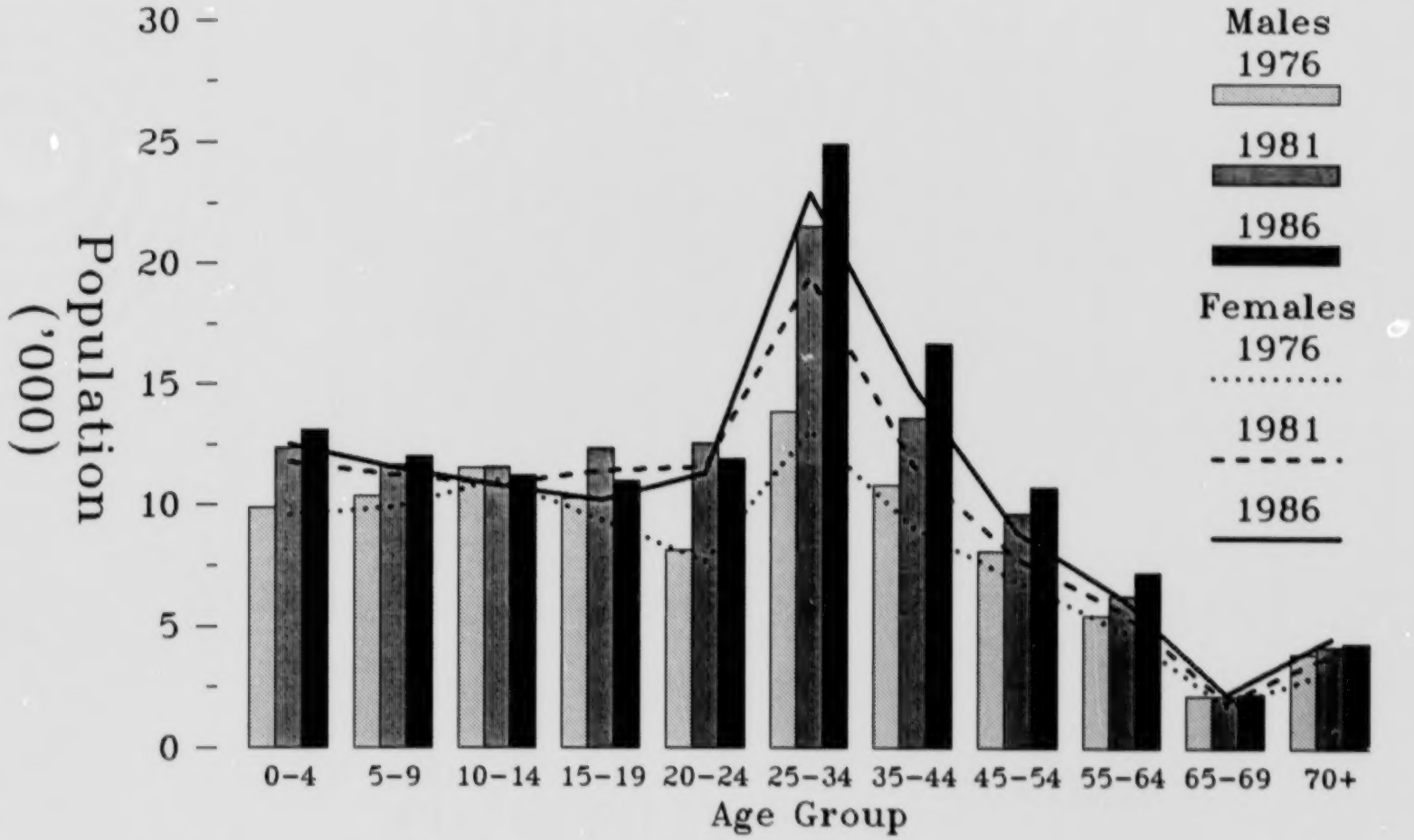


Figure B3
Vital Statistics

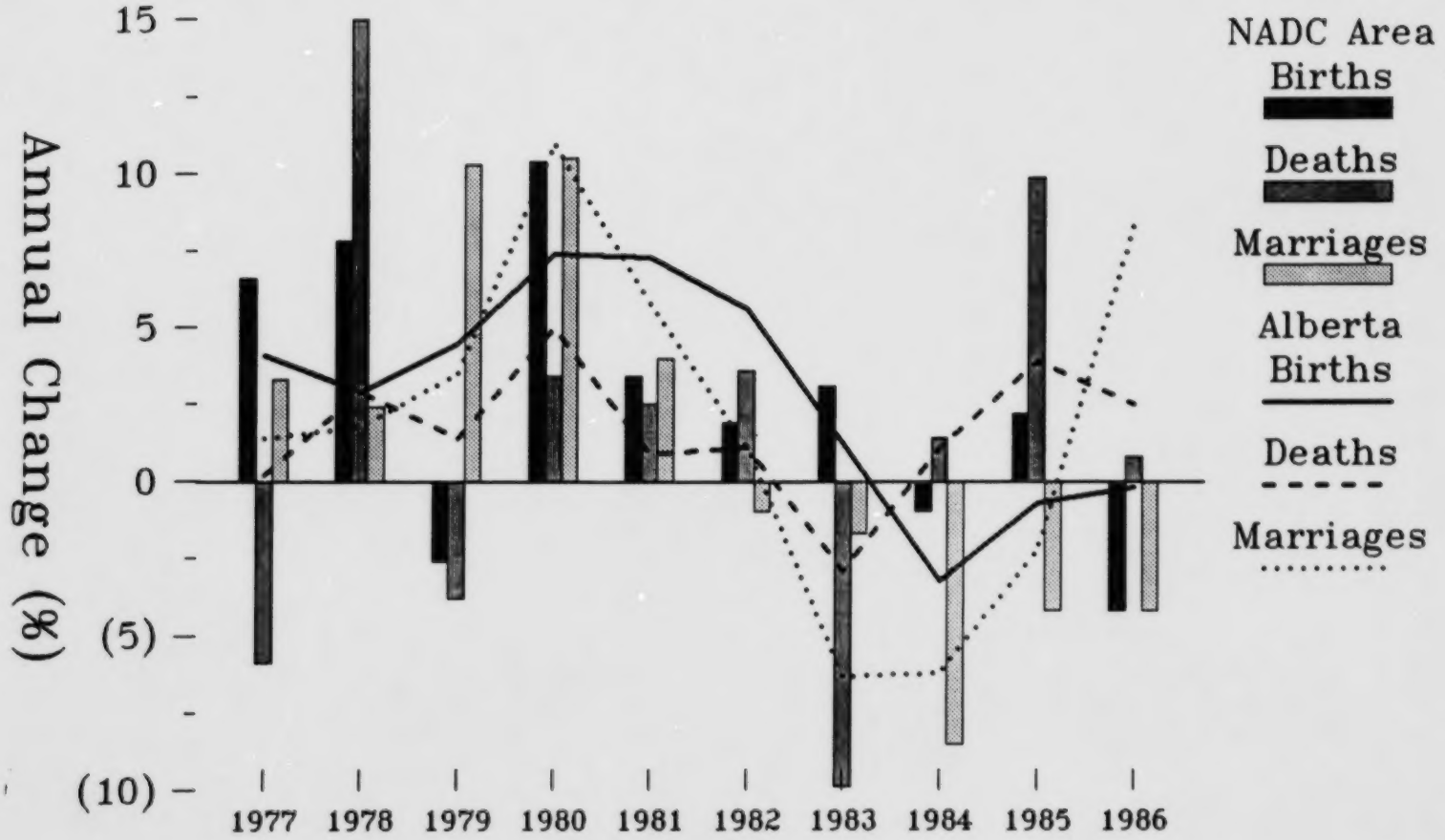


TABLE B1
Population
by Age Group and Gender

	MALES			FEMALES			TOTAL		
	1976	1981	1986	1976	1981	1986	1976	1981	1986
NADC AREA									
0-4	9 895	12 355	13 105	9 615	11 800	12 525	19 510	24 155	25 630
5-9	10 380	11 665	12 015	9 940	11 260	11 600	20 320	22 925	23 615
10-14	11 520	11 600	11 250	11 080	10 885	10 860	22 600	22 485	22 110
15-19	10 260	12 360	11 020	9 425	11 435	10 210	19 685	23 795	21 230
20-24	8 135	12 575	11 945	7 700	11 620	11 370	15 835	24 195	23 315
25-34	13 900	21 580	24 960	13 145	19 540	22 960	27 045	41 120	47 920
35-44	10 845	13 605	16 685	9 100	11 665	14 930	19 945	25 270	31 615
45-54	8 085	9 655	10 775	6 875	7 820	8 880	14 960	17 475	19 655
55-64	5 475	6 280	7 245	4 845	5 620	6 205	10 320	11 900	13 450
65-69	2 145	2 160	2 235	1 770	1 940	2 265	3 915	4 100	4 500
70+	3 915	4 210	4 340	3 195	3 870	4 545	7 110	8 080	8 885
TOTAL	94 555	118 045	125 575	86 690	107 455	116 350	181 245	225 500	241 925
AVERAGE ANNUAL CHANGE (%)		4.5	1.2		4.4	1.6		4.5	1.4
ALBERTA									
0-4	78 375	96 680	105 030	74 550	91 285	100 045	152 925	187 965	205 075
5-9	83 510	89 300	94 390	79 490	84 850	89 330	163 000	174 150	183 720
10-14	95 565	92 125	88 590	91 645	87 430	83 970	187 210	179 555	172 560
15-19	98 960	109 705	92 865	94 255	104 725	89 305	193 215	214 430	182 170
20-24	94 580	137 025	112 150	91 425	127 305	112 740	186 005	264 330	224 890
25-34	150 035	227 690	247 960	143 995	207 865	236 890	294 030	435 555	484 850
35-44	106 015	134 190	168 630	99 810	125 130	161 505	205 825	259 320	330 135
45-54	93 190	106 085	110 590	90 200	97 645	104 660	183 390	203 730	215 250
55-64	66 395	76 190	87 705	68 155	79 110	88 155	134 550	155 300	175 860
65-69	23 925	27 005	30 355	24 555	30 420	34 770	48 480	57 425	65 125
70+	41 820	47 235	53 780	47 630	58 725	72 415	89 450	105 960	126 195
TOTAL	932 370	1 143 230	1 192 045	905 710	1 094 490	1 173 785	1 838 080	2 237 720	2 365 830
AVERAGE ANNUAL CHANGE (%)		4.2	0.8		3.9	1.4		4.0	1.1
NADC AREA AS % OF ALBERTA									
0-4	12.6	12.8	12.5	12.9	12.9	12.5	12.8	12.9	12.5
5-9	12.4	13.1	12.7	12.5	13.3	13.0	12.5	13.2	12.9
10-14	12.1	12.6	12.7	12.1	12.4	12.9	12.1	12.5	12.8
15-19	10.4	11.3	11.9	10.0	10.9	11.4	10.2	11.1	11.7
20-24	8.6	9.2	10.7	8.4	9.1	10.1	8.5	9.2	10.4
25-34	9.3	9.5	10.1	9.1	9.4	9.7	9.2	9.4	9.9
35-44	10.2	10.1	9.9	9.1	9.3	9.2	9.7	9.7	9.6
45-54	8.7	9.1	9.7	7.6	8.0	8.5	8.2	8.6	9.1
55-64	8.2	8.2	8.3	7.1	7.1	7.0	7.7	7.7	7.6
65-69	9.0	8.0	7.4	7.2	6.4	6.5	8.1	7.1	6.9
70+	9.4	8.9	8.1	6.7	6.6	6.3	7.9	7.6	7.0
TOTAL	10.1	10.3	10.5	9.6	9.8	9.9	9.9	10.1	10.2

SOURCE:
- Census of Canada

NOTES:
- NADC area includes totals for Census Divisions 12, 13 & 15 for 1976 & 1981, and totals for Census Divisions 12, 13, 16, 17, 18 & 19 for 1986, both adjusted for the NADC area.
- 1986 totals do not include Indian Reserves that were incompletely enumerated.

TABLE B2
Family Status
by Family Type

	1976	1981	1986
NADC AREA			
Total Families	41 110	54 030	60 015
Husband/Wife Families	37 795	49 140	53 475
Husband/Wife Families, No Children	9 915	14 155	15 880
Husband/Wife Families, Children	27 880	34 985	37 595
Single-Parent Families	3 330	4 880	6 540
AVERAGE ANNUAL CHANGE (%)			
Total Families		5.6	2.1
Husband/Wife Families		5.4	1.7
Husband/Wife Families, No Children		7.4	2.3
Husband/Wife Families, Children		4.6	1.4
Single-Parent Families		7.9	6.0
ALBERTA			
Total Families	448 770	565 635	616 320
Husband/Wife Families	407 570	508 720	543 460
Husband/Wife Families, No Children	135 110	185 645	201 270
Husband/Wife Families, Children	272 460	323 075	342 190
Single-Parent Families	41 200	56 915	72 860
AVERAGE ANNUAL CHANGE (%)			
Total Families		4.7	1.7
Husband/Wife Families		4.5	1.3
Husband/Wife Families, No Children		6.6	1.6
Husband/Wife Families, Children		3.5	1.2
Single-Parent Families		6.7	5.1
NADC AREA AS % OF ALBERTA			
Total Families	9.2	9.6	9.7
Husband/Wife Families	9.3	9.7	9.8
Husband/Wife Families, No Children	7.3	7.6	7.9
Husband/Wife Families, Children	10.2	10.8	11.0
Single-Parent Families	8.1	8.6	9.0

SOURCE:
- Census of Canada

NOTES:
- NADC area data include totals for Census Divisions 12, 13 & 15 for 1976 & 1981 and totals for Census Divisions 12, 13, 16, 17, 18 & 19 for 1986, adjusted to the NADC area boundary.
- "Husband/Wife Families" include common-law households.

TABLE B3
Mother Tongue
by Major Language Group

	1971	1976	1981	1986
NADC AREA				
English	126 720	133 225	170 690	186 340
French	16 375	13 620	15 595	13 320
Other	50 100	34 403	39 273	42 290
TOTAL	193 195	181 248	225 558	241 950
AVERAGE ANNUAL CHANGE (%)			4.5	1.4
ALBERTA				
English	1 263 935	1 482 720	1 810 545	1 914 445
French	46 500	44 440	62 145	48 070
Other	317 440	310 877	365 034	403 310
TOTAL	1 627 875	1 838 037	2 237 724	2 365 825
AVERAGE ANNUAL CHANGE (%)			4.0	1.1
NADC AREA AS % OF ALBERTA				
English	10.0	9.0	9.4	9.7
French	35.2	30.6	25.1	27.7
Other	15.8	11.1	10.8	10.5
TOTAL	11.9	9.9	10.1	10.2

SOURCES:
- Census of Canada (1976,1981,1986)
- Trends 1971-1979 (1971)

NOTES:
- NADC area data are based on totals for Census Divisions 12, 13, 15 (1971,1976,1981) and Census Divisions, 12,13,16,17,18 & 19 (1986).
- 1971 data are not adjusted for the NADC boundary.

TABLE B4
Religious Status
by Type

	1971	1981
NORTHERN REGION		
Protestant	101 805	131 585
Catholic	77 185	97 135
Other	4 500	11 681
No Preference	9 700	26 160
TOTAL	193 190	266 561
AVERAGE ANNUAL CHANGE (%)		
Protestant		2.6
Catholic		2.3
Other		10.0
No Preference		10.4
TOTAL		3.3
ALBERTA		
Protestant	1 038 325	1 240 000
Catholic	432 460	613 930
Other	48 680	124 729
No Preference	108 410	259 065
TOTAL	1 627 875	2 237 724
AVERAGE ANNUAL CHANGE (%)		
Protestant		1.8
Catholic		3.6
Other		9.9
No Preference		9.1
TOTAL		3.2
NORTHERN REGION AS % OF ALBERTA		
Protestant	9.8	10.6
Catholic	17.8	15.8
Other	9.2	9.4
No Preference	8.9	10.1
TOTAL	11.9	11.9

SOURCES:
- 1971 Census of Canada, Religious Denominations (Cat. # 92-724)
- 1981 Census of Canada, Selected Social & Economic Characteristics (Cat. # 95-991)

NOTE:
- Northern Region data are based on totals for Census Divisions 12, 13 & 15.

TABLE B5
Vital Statistics

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
NADC AREA											
Births	4 058	4 324	4 663	4 542	5 015	5 186	5 287	5 450	5 398	5 515	5 281
Deaths	1 041	980	1 133	1 090	1 127	1 155	1 197	1 079	1 094	1 202	1 212
Marriages	1 406	1 452	1 487	1 640	1 812	1 884	1 865	1 833	1 677	1 606	1 539
ANNUAL CHANGE (%)											
Births		6.6	7.8	-2.6	10.4	3.4	1.9	3.1	-1.0	2.2	-4.2
Deaths		-5.9	15.6	-3.8	3.4	2.5	3.6	-9.9	1.4	9.9	0.8
Marriages		3.3	2.4	10.3	10.5	4.0	-1.0	-1.7	-8.5	-4.2	-4.2
ALBERTA											
Births	33 063	34 406	35 396	37 003	39 749	42 638	45 036	45 555	44 105	43 813	43 744
Deaths	11 584	11 609	11 944	12 109	12 710	12 823	12 968	12 588	12 730	13 231	13 560
Marriages	15 988	16 218	16 508	17 094	18 975	20 068	20 288	19 013	17 826	17 438	18 896
ANNUAL CHANGE (%)											
Births		4.1	2.9	4.5	7.4	7.3	5.6	1.2	-3.2	-0.7	-0.2
Deaths		0.2	2.9	1.4	5.0	0.9	1.1	-2.9	1.1	3.9	2.5
Marriages		1.4	1.8	3.5	11.0	5.8	1.1	-6.3	-6.2	-2.2	8.4
NADC AREA AS % OF ALBERTA											
Births	12.3	12.6	13.2	12.3	12.6	12.2	11.7	12.0	12.2	12.6	12.1
Deaths	9.0	8.4	9.5	9.0	8.9	9.0	9.2	8.6	8.6	9.1	8.9
Marriages	8.8	9.0	9.0	9.6	9.5	9.4	9.2	9.6	9.4	9.2	8.1

SOURCE:
- Statistics Canada, Demography Division

NOTE:
- NADC area data include totals for Census Divisions 12, 13 & 15 for 1976-85, and Census Divisions 12, 13, 16, 17, 18 & 19 for 1986, all adjusted for the NADC boundary.

TABLE B6
Causes of Death by Type
(Number)

	MALES							FEMALES							TOTAL						
	1982	1983	1984	1985	1986	1987	1988	1982	1983	1984	1985	1986	1987	1988	1982	1983	1984	1985	1986	1987	1988
NORTHERN REGION																					
Neoplasms	147	153	132	151	162	136	133	72	87	81	99	112	97	102	219	240	213	250	274	233	235
Circulatory Disease	286	256	245	249	265	267	240	165	136	168	156	163	170	180	451	392	413	405	428	437	420
Respiratory Disease	63	62	51	61	61	61	53	36	37	23	39	30	31	27	99	99	74	100	91	92	80
Accidents, Poisoning	157	138	155	165	165	147	149	50	51	46	57	46	44	40	207	189	201	222	211	191	189
All other Causes	122	90	117	116	97	99	113	102	373	81	99	96	73	95	224	463	198	215	193	172	208
ANNUAL CHANGE (%)																					
Neoplasms		4.1	-13.7	14.4	7.3	-16.0	-2.2		20.8	-6.9	22.2	13.1	-13.4	5.2		9.6	-11.3	17.4	9.6	-15.0	0.9
Circulatory Disease		-10.5	-4.3	1.6	6.4	0.8	-10.1		-17.6	23.5	-7.1	4.5	4.3	5.9		-13.1	5.4	-1.9	5.7	2.1	-3.9
Respiratory Disease		-1.6	-17.7	19.6	0.0	0.0	-13.1		2.8	-37.8	69.6	-23.1	3.3	-12.9		0.0	-25.3	35.1	-9.0	1.1	-13.0
Accidents, Poisoning		-12.1	12.3	6.5	0.0	-10.9	1.4		2.0	-9.8	23.9	-19.3	-4.3	-9.1		-8.7	6.3	10.4	-5.0	-9.5	-1.0
All other Causes		-26.2	30.0	-0.9	-16.4	2.1	14.1		265.7	-78.3	22.2	-3.0	-24.0	30.1		106.7	-57.2	8.6	-10.2	-10.9	20.9
ALBERTA																					
Neoplasms	1 642	1 570	1 657	1 784	1 787	1 798	1 938	1 231	1 267	1 328	1 420	1 498	1 515	1 606	2 873	2 837	2 985	3 204	3 285	3 313	3 544
Circulatory Disease	3 060	3 016	3 062	2 995	3 018	3 023	2 992	2 205	2 227	2 252	2 389	2 489	2 394	2 474	5 265	5 243	5 314	5 384	5 507	5 417	5 466
Respiratory Disease	646	660	624	705	677	670	741	342	400	349	416	434	401	466	988	1 060	973	1 121	1 111	1 071	1 207
Accidents, Poisoning	1 170	1 074	1 108	1 100	1 157	1 113	1 075	418	431	426	444	458	435	402	1 588	1 505	1 534	1 544	1 615	1 548	1 477
All other Causes	1 311	1 082	1 077	1 098	1 103	1 097	1 176	1 063	952	933	950	1 035	944	1 107	2 374	2 034	2 010	2 048	2 138	2 041	2 283
ANNUAL CHANGE (%)																					
Neoplasms		-4.4	5.5	7.7	0.2	0.6	7.8		2.9	4.8	6.9	5.5	1.1	6.0		-1.3	5.2	7.3	2.5	0.9	7.0
Circulatory Disease		-1.4	1.5	-2.2	0.8	0.2	-1.0		1.0	1.1	6.1	4.2	-3.8	3.3		-0.4	1.4	1.3	2.3	-1.6	0.9
Respiratory Disease		2.2	-5.5	13.0	-4.0	-1.0	10.6		17.0	-12.7	19.2	4.3	-7.6	16.2		7.3	-8.2	15.2	-0.9	-3.6	12.7
Accidents, Poisoning		-8.2	3.2	-0.7	5.2	-3.8	-3.4		3.1	-1.2	4.2	3.2	-5.0	-7.6		-5.2	1.9	0.7	4.6	-4.1	-4.6
All other Causes		-17.5	-0.5	1.9	0.5	-0.5	7.2		-10.4	-2.0	1.8	8.9	-8.8	17.3		-14.3	-1.2	1.9	4.4	-4.5	11.9
NORTHERN REGION AS % OF ALBERTA																					
Neoplasms	9.0	9.7	8.0	8.5	9.1	7.6	6.9	5.8	6.9	6.1	7.0	7.5	6.4	6.4	7.6	8.5	7.1	7.8	8.3	7.0	6.6
Circulatory Disease	9.3	8.5	8.0	8.3	8.8	8.8	8.0	7.5	6.1	7.5	6.5	6.5	7.1	7.3	8.6	7.5	7.8	7.5	7.8	8.1	7.7
Respiratory Disease	9.8	9.4	8.2	8.7	9.0	9.1	7.2	10.5	9.3	6.6	9.4	6.9	7.7	5.8	10.0	9.3	7.6	8.9	8.2	8.6	6.6
Accidents, Poisoning	13.4	12.8	14.0	15.0	14.3	13.2	13.9	12.0	11.8	10.8	12.8	10.0	10.1	10.0	13.0	12.6	13.1	14.4	13.1	12.3	12.8
All other Causes	9.3	8.3	10.9	10.6	8.8	9.0	9.6	9.6	39.2	8.7	10.4	9.3	7.7	8.6	9.4	22.8	9.9	10.5	9.0	8.4	9.1

SOURCE:
- Alberta Vital Statistics/Alberta Health, Vital Statistics Information System

NOTES:
- Northern Region data based on information reported by the following Health Units: Athabasca, Fort McMurray, South Peace, High Level, St. Paul and Peace River.
- Total deaths differ from those in Table B5 because B5 is adjusted for out-of-province occurrences and because the data in Table B5 are collected by census subdivisions.

TABLE B7
Mobility Status

	1971	1976	1981	1986
NORTHERN REGION				
Non-Migrants	123 080	93 400	48 665	57 070
Migrants	49 325	102 580	90 210	69 180
From same province	29 700	76 035	31 490	33 130
From different province	10 610	19 835	38 455	22 800
From outside Canada	4 970	4 700	5 330	3 010
Place of Residence Not Stated	4 045	2 010	14 935	10 240
AVERAGE ANNUAL CHANGE (%)				
Non-Migrants		-5.4	-12.2	3.2
Migrants		15.8	-2.5	-5.2
From same province		20.7	-16.2	1.0
From different province		13.3	14.2	-9.9
From outside Canada		-1.1	2.5	-10.8
Place of Residence Not Stated		-13.1	49.3	-7.3
ALBERTA				
Non-Migrants	1 073 225	748 970	522 370	599 690
Migrants	400 905	934 580	691 980	494 890
From same province	190 470	678 520	175 500	172 565
From different province	127 555	175 050	336 835	177 285
From outside Canada	59 880	61 900	75 470	55 985
Place of Residence Not Stated	23 000	19 110	104 175	89 055
AVERAGE ANNUAL CHANGE (%)				
Non-Migrants		-6.9	-7.0	2.8
Migrants		18.4	-5.8	-6.5
From same province		28.9	-23.7	-0.3
From different province		6.5	14.0	-12.0
From outside Canada		0.7	4.0	-5.8
Place of Residence Not Stated		-3.6	40.4	-3.1
NORTHERN REGION AS % OF ALBERTA				
Non-Migrants	11.5	12.5	9.3	9.5
Migrants	12.3	11.0	13.0	14.0
From same province	15.6	11.2	17.9	19.2
From different province	8.3	11.3	11.4	12.9
From outside Canada	8.3	7.6	7.1	5.4
Place of Residence Not Stated	17.6	10.5	14.3	11.5

SOURCE:
- Census of Canada, Internal Migration, Catalogue numbers 92-719 (1971), 92-828 (1976), 92-907 (1981), 94-118 (1986)

NOTES:
- This table includes MOVERS: persons who on Census Day were living in a different dwelling than the one occupied five years earlier.
- Non-Migrants are movers who, on Census Day, were living within the same census subdivision they resided in five years earlier.
- Migrants are movers who, on Census day, were residing in a different CD within Canada, or were living outside Canada, five years earlier.
- Northern Region is defined as Census Divisions 12, 13 & 15 for 1971, 1976 & 1981, and Census Divisions 12, 13, 16, 17, 18 and 19 for 1986.

INCOME AND LABOR FORCE

Introduction

The mid-1980s saw an increase in unemployment in the NADC area and the province as the Alberta economy slowed down. The average income in the NADC area is lower than the provincial average. However, from 1981 to 1986, the average income for both the NADC region and the province increased at the same rate.

C1 Experienced Labor Force

Highlights

- The total experienced labor force increased 15 percent from 1981 to 1986, a larger increase than the 7 percent registered in the province.
- The largest rise was seen in the community, business and personal service industries, which saw an increase of 7,980 workers (33 percent) from 1981 to 1986.
- The only sector which saw a decline was the construction labor force which fell by 8 percent from 1981 to 1986, albeit a lesser drop than the 29 percent registered in the province.
- In 1986, almost 18 percent of the primary labor force in the province was found in the NADC area.
- The NADC area comprised a much smaller proportion of the provincial labor force in manufacturing and finance, insurance and real estate.

C2 Employment Status of Labor Force

1981 to 1986 proved to be difficult years in the NADC area, with the number of unemployed increasing by 147 percent. However, this was less than the total provincial increase of 184 percent. In 1986, 56 percent (7,055) of the total unemployed labor force in the NADC area was male. This percentage was about the same (57 percent) in 1981.

C3 Average Personal Income

From personal income census data it is apparent that residents of northern Alberta consistently earned less than the provincial average from the years 1976 to 1986.

Highlights

- In 1986, the lowest average annual income was $11,150 in Plamondon, with the highest being $29,140 in Fort McMurray.
- Over the period 1976 to 1986, average incomes in the NADC area have generally kept pace with the provincial average, increasing 83 percent versus 84 percent for the province.
- 1986 NADC figures saw only a slight (1 percent) increase in salary over the previous year. However, this was higher than the provincial figures, which registered a negligible increase in total income from 1985 to 1986.

C4 Average Family Income

Family income trends are similar to those found in the personal income data. A wide variation in family incomes exists in the NADC area, with Plamondon and Fort McMurray encompassing the range in 1986. Also, while the average family income in the NADC region is lower, it rose at the same rate as the provincial average over the period 1981 to 1986

Figure C1

Experienced Labor Force by Sector

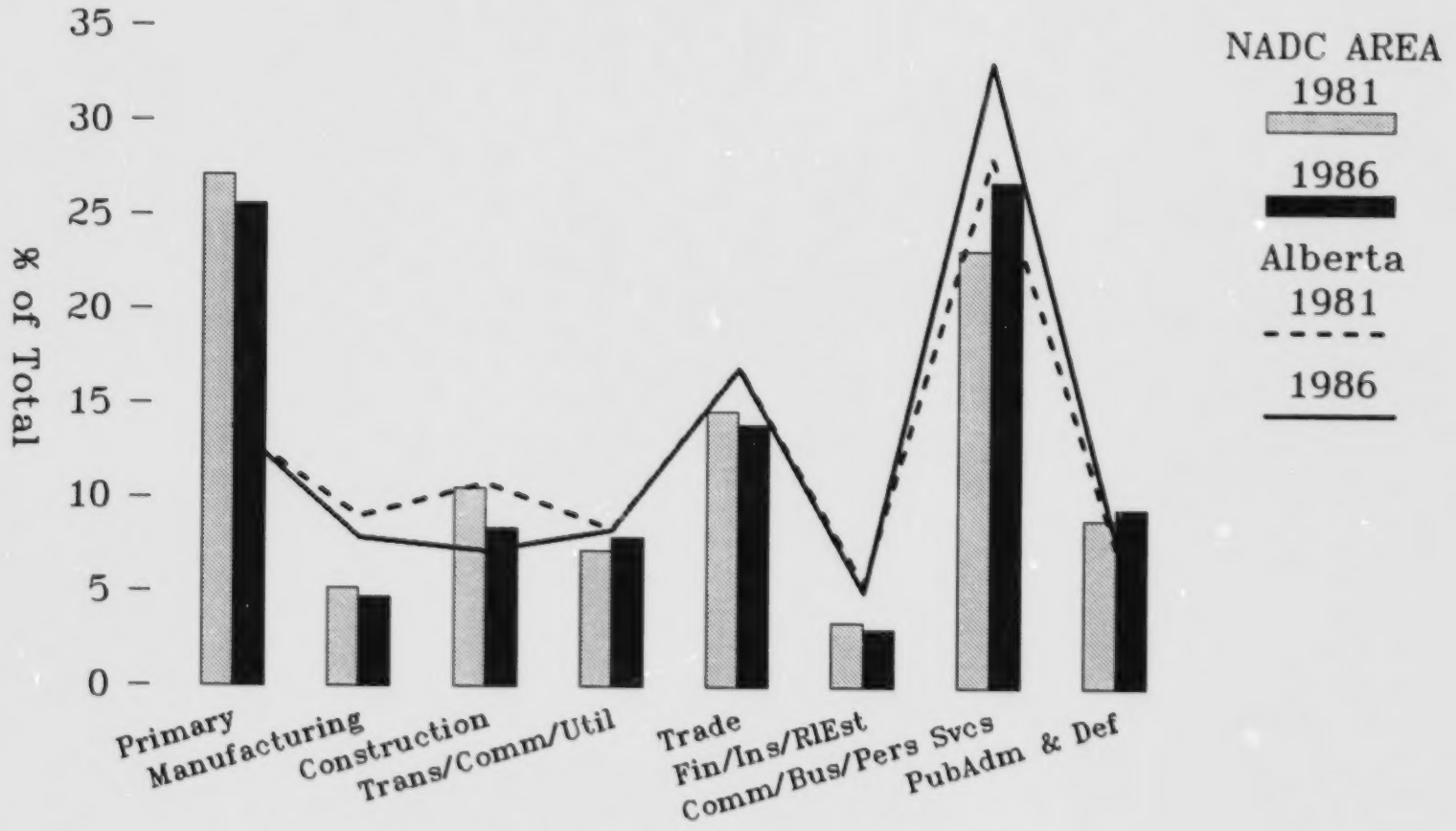


TABLE C1
Experienced Labor Force by Sector

	1981	1986
NADC AREA		
Total Experienced Labor Force	104 705	120 195
Primary	28 325	30 815
Manufacturing	5 410	5 685
Construction	11 020	10 095
Transportation, Communications, Other Utilities	7 530	9 480
Trade	15 270	16 745
Finance, Insurance, Real Estate	3 525	3 710
Community, Business, Personal Services	24 315	32 295
Public Administration and Defence	9 310	11 370
AVERAGE ANNUAL CHANGE (%)		
Total Experienced Labor Force		2.8
Primary		1.7
Manufacturing		1.0
Construction		-1.7
Transportation, Communications, Other Utilities		4.7
Trade		1.9
Finance, Insurance, Real Estate		1.0
Community, Business, Personal Services		5.8
Public Administration and Defence		4.1
ALBERTA		
Total Experienced Labor Force	1 195 170	1 274 695
Primary	164 035	175 870
Manufacturing	108 005	100 230
Construction	128 810	92 025
Transportation, Communications, Other Utilities	100 365	105 465
Trade	202 680	215 075
Finance, Insurance, Real Estate	65 860	64 705
Community, Business, Personal Services	336 740	423 635
Public Administration and Defence	88 675	97 690
AVERAGE ANNUAL CHANGE (%)		
Total Experienced Labor Force		1.3
Primary		1.4
Manufacturing		-1.5
Construction		-6.5
Transportation, Communications, Other Utilities		1.0
Trade		1.2
Finance, Insurance, Real Estate		-0.4
Community, Business, Personal Services		
Public Administration and Defence		2.0
NADC AREA AS % OF ALBERTA		
Total Experienced Labor Force	**8.8**	**9.4**
Primary	**17.3**	**17.5**
Manufacturing	**5.0**	**5.7**
Construction	**8.6**	**11.0**
Transportation, Communications, Other Utilities	**7.5**	**9.0**
Trade	**7.5**	**7.8**
Finance, Insurance, Real Estate	**5.4**	**5.7**
Community, Business, Personal Services	**7.2**	**7.6**
Public Administration and Defence	**10.5**	**11.6**

SOURCE:
- Census of Canada

NOTES:
- Census of Canada catalogue number 12-501 defines sectors.
- NADC area data include totals for CDs 12, 13 & 15 for 1981, and CDs 12, 13, 16, 17, 18 & 19 for 1986, adjusted for the NADC area boundary.
- Experienced labor force is reported for population 15 years of age and over and excludes institutional residents and those who have never worked or had not worked in the 17 months prior to the census.

TABLE C2
Employment Status of Labor Force by Gender

	1976	1981	1986
NADC AREA			
Males	50 065	67 500	73 970
Employed	48 230	64 560	66 915
Unemployed	1 835	2 940	7 055
Females	27 955	37 740	47 685
Employed	26 655	35 540	42 065
Unemployed	1 300	2 200	5 620
TOTAL	78 020	105 240	121 655
Employed	74 885	100 100	108 980
Unemployed	3 135	5 140	12 675
AVERAGE ANNUAL CHANGE (%)			
Total		6.2	2.9
Employed		6.0	1.7
Unemployed		10.4	19.8
ALBERTA			
Males	536 915	723 730	737 975
Employed	517 955	699 740	665 565
Unemployed	18 960	23 990	72 410
Females	336 585	476 245	554 385
Employed	320 955	455 915	500 915
Unemployed	15 630	20 330	53 470
TOTAL	873 500	1 199 975	1 292 360
Employed	838 910	1 155 655	1 166 480
Unemployed	34 590	44 320	125 880
AVERAGE ANNUAL CHANGE (%)			
Total		6.6	1.5
Employed		6.6	0.2
Unemployed		5.1	23.2
NADC AREA AS % OF ALBERTA			
Males	9.3	9.3	10.0
Employed	9.3	9.2	10.1
Unemployed	9.7	12.3	9.7
Females	8.3	7.9	8.6
Employed	8.3	7.8	8.4
Unemployed	8.3	10.8	10.5
TOTAL	8.9	8.8	9.4
Employed	8.9	8.7	9.3
Unemployed	9.1	11.6	10.1

SOURCE:
- Census of Canada

NOTES:
- NADC area data include totals for Census Divisions 12, 13 and 15 for 1976 and 1981, and Census Divisions 12, 13, 16, 17, 18 and 19 for 1986, both adjusted for the NADC area boundary.
- TOTAL refers to total labor force, as opposed to experienced labor force as in Table C1.

TABLE C3
Average Personal Income by Municipality

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
NADC AREA											
Athabasca	8 901	10 141	10 141	11 435	12 745	14 673	15 557	14 126	15 242	16 560	16 840
Berwyn	NA	NA	NA	11 039	11 849	14 754	14 880	15 062	16 903	16 990	15 800
Bonnyville	8 559	9 734	9 075	10 680	11 998	12 413	13 257	13 105	14 609	17 960	17 650
Boyle	7 714	8 891	8 226	9 699	10 215	11 861	12 354	11 577	12 306	12 830	13 280
CO 1 Grande Prairie	8 515	9 916	9 279	11 076	12 770	14 537	14 772	14 563	15 195	16 237	15 839
CO 12 Athabasca	8 337	9 528	9 197	10 482	11 546	13 324	14 099	12 881	13 881	15 050	15 270
CO 19 St. Paul	8 227	9 192	8 573	9 724	11 125	13 045	14 063	13 822	14 184	14 740	14 970
Donnelly	8 274	9 048	8 304	9 842	11 448	14 668	15 112	14 676	15 254	17 300	16 480
Eaglesham	NA	NA	NA	NA	NA	12 352	11 495	12 060	11 672	15 193	13 370
Elk Point	7 896	8 661	8 440	9 213	10 822	12 414	12 834	13 128	14 137	15 080	14 850
Fairview	9 449	10 324	9 801	10 914	12 962	14 918	15 317	15 495	16 324	17 130	16 820
Falher	9 134	9 860	8 696	10 364	11 739	13 627	14 326	14 123	15 228	16 270	15 190
Fort Assiniboine	7 058	7 797	NA	9 607	10 286	11 992	12 382	11 260	12 807	14 120	13 840
Fort McMurray	15 284	16 298	16 249	17 164	19 091	22 846	26 748	28 688	29 900	29 710	29 140
Fox Creek	13 179	14 421	13 057	14 404	16 661	18 949	21 161	22 125	23 147	24 680	25 360
Girouxville	9 500	10 268	8 403	10 100	10 935	14 469	14 869	13 401	15 173	14 790	15 610
Glendon	6 728	8 065	7 436	8 058	10 189	11 222	11 971	11 158	11 683	12 610	12 260
Grand Centre	9 798	10 562	10 038	10 971	12 398	14 180	15 581	15 135	17 234	17 110	18 000
Grande Cache	12 733	15 080	13 674	14 267	15 287	19 430	20 518	22 683	22 712	20 680	22 930
Grande Prairie	10 927	12 102	12 112	14 072	16 076	18 388	18 911	19 171	19 592	20 290	20 470
Grimshaw	9 462	10 609	10 355	11 756	13 743	14 988	15 697	15 587	16 344	16 690	16 970
High Level	NA	NA	NA	NA	NA	15 074	17 229	18 838	19 413	18 890	19 820
High Prairie	8 618	9 124	8 867	10 047	11 214	13 080	14 841	15 045	14 655	14 940	15 260
Hines Creek	7 504	8 748	7 572	8 370	10 480	11 160	11 857	11 286	12 514	13 080	13 240
Hythe	7 076	8 720	7 966	9 451	11 552	13 026	13 369	12 727	13 184	13 440	12 450
ID 15	9 016	10 608	11 091	12 701	14 629	16 144	17 170	17 210	17 388	14 120	13 840
ID 16	10 770	12 263	11 078	12 014	13 364	16 067	16 891	17 602	17 928	17 516	18 755
ID 17	9 706	10 448	9 947	11 258	12 631	14 493	15 374	15 175	15 772	17 126	17 225
ID 18	8 013	8 954	7 457	8 218	9 204	10 425	11 174	11 582	12 676	12 834	13 288
ID 19	7 755	8 666	7 202	9 103	9 751	11 991	11 257	11 171	11 916	14 141	13 480
ID 20	6 390	7 699	7 314	8 303	9 335	10 700	10 059	9 905	9 908	11 300	12 339
ID 21	7 168	8 573	7 075	7 986	9 915	11 152	11 071	10 440	11 375	12 206	12 508
ID 22	7 547	8 602	7 930	9 241	10 039	11 839	12 597	12 498	13 426	14 573	13 660
ID 23	8 868	10 193	8 073	9 044	10 277	11 653	13 507	14 143	15 407	14 574	14 964
Kinuso	8 418	9 319	8 893	9 630	9 647	8 073	7 460	6 942	7 298	12 250	12 260
Lac La Biche	8 537	9 458	8 043	8 846	9 848	10 962	11 652	12 132	13 406	15 120	15 370
Manning	8 235	9 381	8 744	10 263	10 963	12 989	13 999	13 909	14 523	16 240	14 900
McLennan	9 166	9 945	8 995	10 085	11 649	13 690	15 408	16 171	16 286	15 990	16 760
MD 130 Smoky River	8 654	9 369	8 428	9 796	11 118	13 506	14 273	14 083	15 000	15 579	15 426
MD 133 Spirit River	8 175	9 117	8 216	9 588	11 426	13 480	13 162	12 944	13 492	14 005	15 081
MD 135 Peace	9 131	10 144	9 826	11 147	12 869	14 531	15 047	15 458	16 097	16 391	16 376
MD 136 Fairview	9 124	9 974	9 457	10 653	12 548	14 478	14 899	15 193	16 074	16 736	16 398
MD 87 Bonnyville	9 740	10 638	9 687	10 858	12 362	13 635	14 922	15 240	16 817	18 440	18 830
Peace River	10 314	11 039	11 619	12 950	13 981	15 687	16 671	16 283	16 949	20 100	20 150

TABLE C3
Average Personal Income by Municipality

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Plamondon	7 862	8 394	7 422	8 008	8 340	9 915	9 535	10 699	11 776	11 520	11 150
Rainbow Lake	14 034	15 484	14 598	16 009	18 905	21 469	23 927	25 366	27 252	27 320	28 880
Rycroft	8 064	9 065	8 130	9 982	12 049	13 742	13 773	13 045	13 616	14 020	15 310
Sexsmith	8 737	10 736	9 322	11 197	13 031	15 105	15 176	15 023	15 864	16 710	16 560
Slave Lake	10 380	11 034	10 668	12 377	14 171	17 425	18 637	19 551	19 618	19 130	19 270
Spirit River	8 230	9 143	8 258	9 392	11 108	13 346	12 863	12 893	13 429	13 990	14 960
St. Paul	8 841	9 808	9 428	10 592	11 949	14 112	15 427	15 222	15 307	15 740	16 180
Swan Hills	13 268	14 299	13 955	15 669	17 552	19 968	23 087	23 360	23 908	24 930	26 160
Valleyview	8 876	9 881	9 494	10 769	12 334	14 163	14 813	14 869	15 654	15 070	16 230
Wanham	7 204	8 603	7 747	11 212	10 640	12 901	12 123	11 475	11 893	14 700	14 070
Wembley	9 159	10 559	9 648	11 778	13 863	15 886	16 099	15 792	16 764	17 720	17 720
Whitecourt	9 745	11 253	11 677	13 365	15 419	16 986	18 152	18 256	18 266	19 180	19 670
AVERAGE	9 094	10 184	9 517	10 829	12 260	14 141	14 882	14 917	15 685	16 458	16 598
ANNUAL CHANGE (%)		12.0	-6.5	13.8	13.2	15.3	5.2	0.2	5.2	4.9	0.9
ALBERTA	11 155	12 085	12 054	13 638	15 406	17 939	19 702	19 536	19 750	20 525	20 533
ANNUAL CHANGE (%)		8.3	-0.3	13.1	13.0	16.4	9.8	-0.8	1.1	3.9	0.0
NADC AREA AS % OF ALBERTA	81.5	84.3	79.0	79.4	79.6	78.8	75.5	76.4	79.4	80.2	80.8

SOURCE:
- Revenue Canada

NOTES:
- Includes income reported by individuals filing a tax return.
- NADC averages are not weighted averages; Alberta averages are weighted.
- Native and Metis incomes are not available.
- Data for Beaverlodge, Cold Lake and Nampa are not available.

TABLE C4
Average Family Income by Municipality

	1981	1986
NADC AREA		
Athabasca	25 518	34 811
Beaverlodge	26 550	34 006
Berwyn	26 888	32 083
Bonnyville	24 284	35 032
Boyle	18 234	26 031
CO 1 – Grande Prairie	29 212	36 023
CO 12 – Athabasca	22 210	30 327
CO 19 – St. Paul	21 788	30 447
Cold Lake	26 755	45 391
Donnelly	32 303	36 710
Elk Point	21 067	35 316
Fairview	26 046	39 458
Falher	22 090	38 738
Fort Assiniboine	19 678	NA
Fort McMurray	36 421	57 593
Fox Creek	33 272	44 866
Girouxville	21 822	31 651
Glendon	29 359	27 132
Grand Centre	46 256	38 596
Grande Cache	30 730	41 025
Grande Prairie	31 796	40 748
Grimshaw	24 818	34 054
High Level	31 000	41 541
High Prairie	25 148	33 831
Hines Creek	18 521	34 197
Hythe	27 625	27 492
ID 15	27 218	38 670
ID 16	21 841	29 944
ID 17	19 707	28 987
ID 18	19 708	29 893
ID 19	29 749	32 270
ID 20	20 353	27 833
ID 21	22 059	28 203
ID 22	21 322	27 143
ID 23	19 448	28 991
Kinuso	15 976	36 033
Lac La Biche	23 268	37 324
Manning	24 171	33 926
McLennan	23 205	27 471
MD 130 – Smoky River	28 996	31 622
MD 133 – Spirit River	28 059	30 627
MD 135 – Peace	22 696	31 098
MD 136 – Fairview	28 838	32 859
MD 87 – Bonnyville	23 946	37 131

TABLE C4
Average Family Income by Municipality

	1981	1986
Nampa	19 265	34 026
Peace River	31 005	41 241
Plamondon	18 906	24 603
Rainbow Lake	39 335	57 496
Rycroft	20 607	29 026
Sexsmith	24 893	39 805
Slave Lake	28 642	40 678
Spirit River	30 229	36 930
St. Paul	25 106	34 857
Swan Hills	33 277	44 064
Valleyview	24 668	35 528
Wanham	18 591	27 947
Wembley	27 028	37 409
Whitecourt	28 758	37 864
AVERAGE	25 694	35 063
ANNUAL CHANGE (%)		6.4
ALBERTA	30 390	40 740
AVERAGE ANNUAL CHANGE (%)		6.0
NADC AREA AS % OF ALBERTA	**84.5**	**86.1**

SOURCE:
- Census of Canada

NOTES:
- Includes income reported by individuals filing a tax return.
- The NADC average is not a weighted average; the Alberta average is weighted.
- Native and Metis incomes are not available.
- Data for Eaglesham are not available.

EDUCATION

Introduction

In 1988 there were 46 school jurisdictions in the northern region (there are 4 school districts included in the northern region that straddle the NADC boundary), with 244 schools, 3,593 teachers and 59,467 students. The northern region has enjoyed an improved student/teacher ratio since 1979 with an average of 17 to 1 in 1988, equal to the provincial average.

D1 Schools, Teachers and Students

Highlights

- From 1971 to 1988, the number of students in the northern region has dropped 1 percent, the number of teachers has risen 15 percent, and the number of schools has dropped 2 percent.
- In comparison to northern region totals, the number of schools in the province has increased 24 percent since 1971, the number of teachers has increased 23 percent, and the number of students has risen 8 percent.

D2 Students Registered at Advanced Education Institutions

Vocational and post-secondary education is offered through seven institutions in the NADC area: Athabasca University, Alberta vocational centres in Grouard and Lac La Biche, a community vocational centre, Fairview, Grande Prairie Regional and Keyano Colleges. A total of 9,539 students were registered at the institutions in 1988, a 317 percent increase from 1975 (compared to a 74 percent increase in provincial enrolment). The most substantial increase is in enrolment at Athabasca University, which increased from 145 in 1975 to 3,234 in 1988.

D3 Location of Students Enrolled at Athabasca University

The enrolment base of Athabasca University has broadened substantially since 1977. Total enrolments by students resident in Alberta have increased almost 10-fold. Total enrolments by northern region residents have increased to 1,258 in 1988 from only 221 in 1977.

D4 Full-Time University Enrolments

Highlights

- The number of Albertans enrolled full-time at the Universities of Alberta, Calgary and Lethbridge has increased by 56 percent from 1971 to 1987.
- The proportion of provincial students from the northern region has also grown steadily from 1971 to 1987 to a maximum of 6.3 percent.

D5 Education Level Attained

The number of NADC area residents with less than a grade nine education as well as those in non-university programs who do not attain a degree has declined from 1971 to 1986. To complement this, the number of university students has increased almost 180 percent in the same period. However, in 1986 the NADC region still represented a large proportion (18.1 percent) of total provincial residents with less than a grade nine education and a small proportion (6.7 percent) of those with a university education.

D6 Degrees/Diplomas/Certificates Granted

In 1987 2.9 percent of all degrees, diplomas and certificates granted in the province were received from advanced educational institutions in the NADC area. The growth in the number of degrees granted from these institutions has been consistent over the past

seven years, and has grown from a total of 248 in 1980 to 564 in 1987.

D7 French Immersion Program Enrolments

The number of French-immersion students in the NADC area has been growing over the past decade, with 3,984 students registered in 1987 as compared to 2,659 in 1977. In 1987 sixteen districts offered the program, compared to eight districts in 1977. However, the popularity of French-immersion in the province as a whole has also grown dramatically (245 percent) from 1977 to 1987. Since the NADC area immersion programs have not grown at the same rate, the proportion of provincial French immersion programs in the NADC area has been reduced from a high of 35 percent in 1977 to 15 percent in 1987.

Figure D1

Registration at Advanced Education Institutions

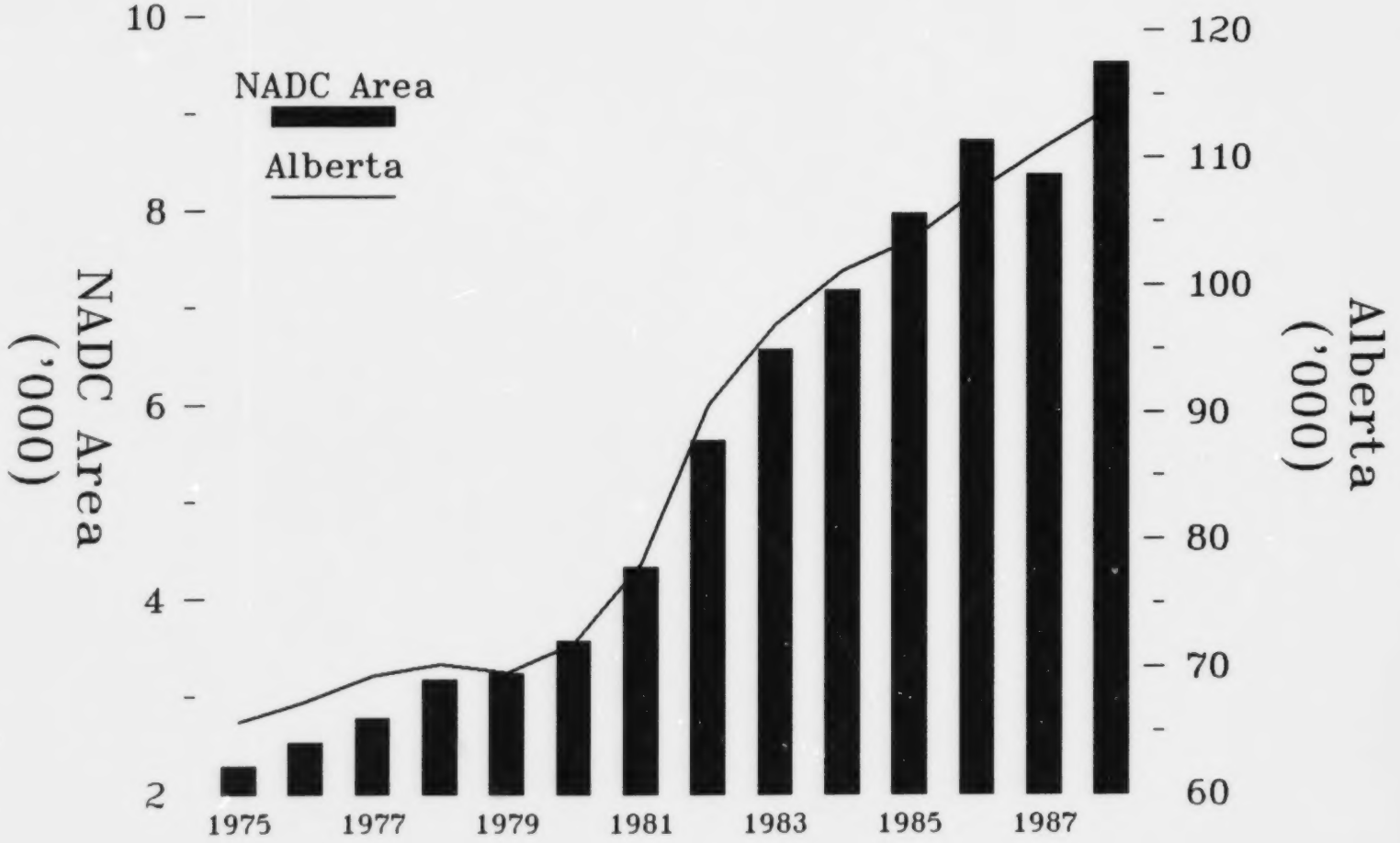


Figure D2

Education Level Attained for the NADC Area

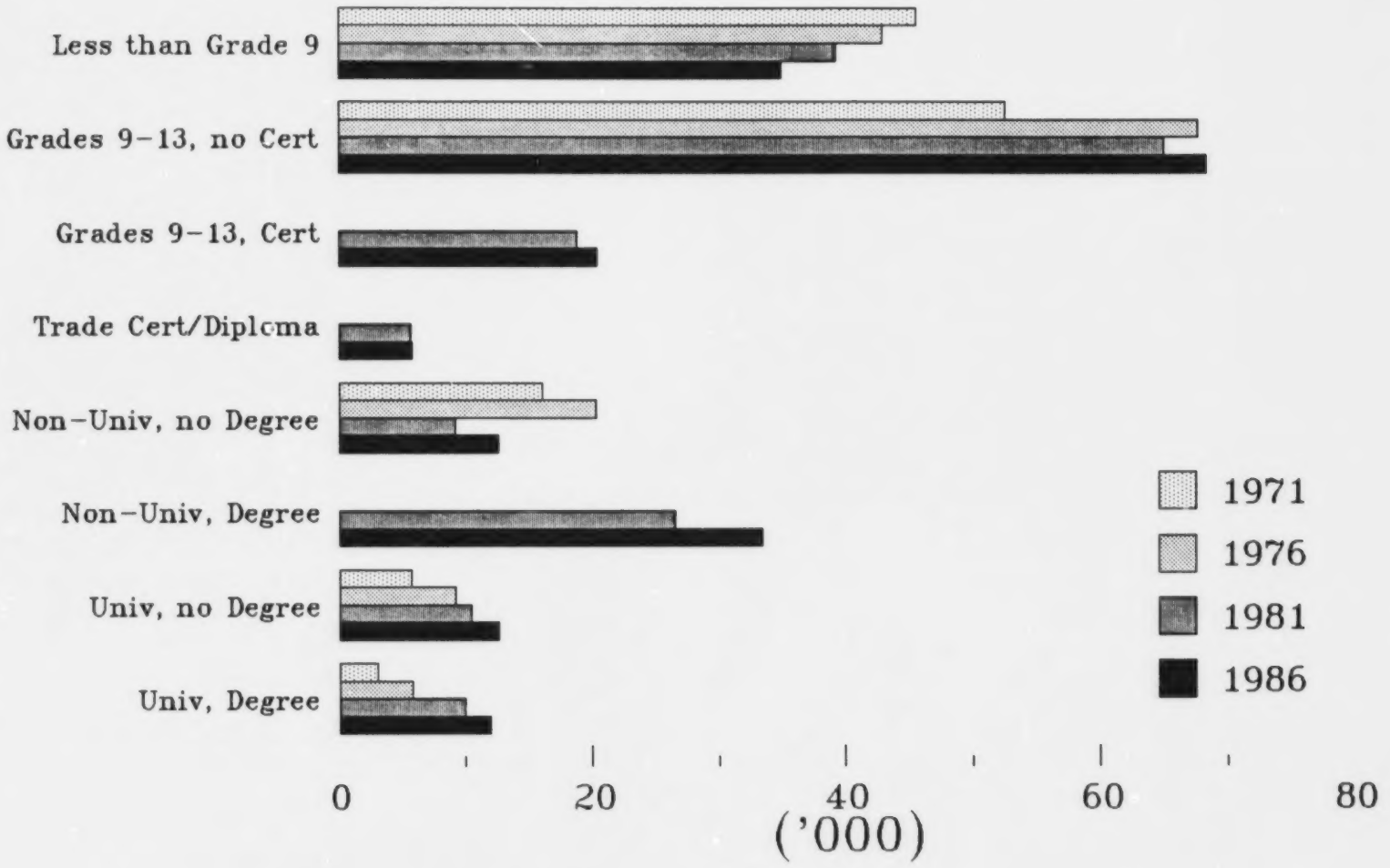


TABLE D1
Schools, Teachers and Students by School District

	SCHOOLS			TEACHERS			STUDENTS			STUDENT/TEACHER RATIO		
	1971	1979	1988	1971	1979	1988	1971	1979	1988	1971	1979	1988
NORTHERN REGION												
Consolidated School District												
Falher #69	1	1	1	27	29	21	551	434	298	20	15	14
County												
CO 12 Athabasca	8	7	7	143	123	102	2 603	2 219	1 735	18	18	17
CO 11 Barrhead	13	10	7	121	135	138	2 470	2 362	2 245	20	17	16
CO 1 Grande Prairie	12	14	15	150	168	186	2 801	2 989	3 370	19	18	18
CO Lac Ste. Anne	17	12	11	203	185	136	3 701	3 583	2 460	18	19	18
CO 19 St. Paul	8	7	6	94	113	116	1 781	1 792	1 692	19	16	15
Dept of National Defence												
Medley School District #5029	4	4	3	149	92	60	2 532	1 036	755	17	11	13
Protestant Separate School District												
Glen Avon #5	1	1	1	24	30	32	492	525	437	21	18	14
School District												
Bonnyville #2665 (1)	3	2	0	52	37	0	969	678	0	19	18	0
Fort McMurray #2833	3	9	14	60	230	246	1 269	4 369	4 336	21	19	18
Grande Cache #5258	1	3	3	33	67	60	634	1 084	886	19	16	15
Grande Prairie #2357	6	8	9	161	199	252	3 022	3 418	4 202	19	17	17
Grovedale #4910	1	1	1	6	4	6	108	93	117	18	23	20
Lakeland #5460	0	0	11	0	0	196	0	0	3 540			
St. Isidore #5054	0	0	1	0	0	14	0	0	208	0	0	15
St. Paul #2228	3	3	2	60	64	58	1 165	876	743	19	14	13
Swan Hills #5109	1	1	1	14	28	25	293	476	389	21	17	16
Roman Catholic Separate												
Aubindale #122	0	0	0	0	0	0	0	0	0	0	0	0
Beaverlodge #68	1	1	1	6	5	4	136	103	68	23	21	17
Berwyn #89	0	0	0	0	0	0	0	0	0	0	0	0

TABLE D1
Schools, Teachers and Students by School District

	SCHOOLS			TEACHERS			STUDENTS			STUDENT/TEACHER RATIO		
	1971	1979	1988	1971	1979	1988	1971	1979	1988	1971	1979	1988
Bevin #124	0	0	0	0	0	0	0	0	0	0	0	0
Cold Lake #64 (1)	1	1	0	17	17	0	297	288	0	17	17	0
Fort McMurray #32	2	5	8	38	89	183	694	1 757	3 359	18	20	18
Fort Vermilion #26	1	1	1	7	8	5	160	126	74	23	16	15
Grand Centre #67 (1)	1	1	0	12	12	0	214	211	0	18	18	0
Grande Prairie #28	3	4	6	42	61	82	882	1 137	1 557	21	19	19
Grimshaw #88 (2)	1	1	0	11	11	0	213	209	0	19	19	0
High Prairie #56	1	1	1	20	23	21	438	418	388	22	18	18
Mazenod #42	0	0	0	0	0	0	0	0	0	0	0	0
McLennan #30	1	1	1	13	13	10	235	180	126	18	14	13
Nampa #96 (2)	1	1	0	4	3	0	118	49	0	30	16	0
North Peace #43	0	0	5	0	0	61	0	0	1 022	0	0	17
Peace River #43 (2)	2	2	0	26	37	0	534	669	0	21	18	0
Rio Grande #118	0	0	0	0	0	0	0	0	0	0	0	0
Rosary #37 (2)	1	1	0	12	12	0	242	210	0	20	18	0
Sexsmith #51	1	1	1	5	6	6	111	104	101	22	17	17
Spirit River #36	1	1	1	4	6	4	71	99	72	18	17	18
St. Thomas More #35	1	1	0	22	22	0	436	415	0	20	19	0
Valleyview #84	1	1	1	23	16	15	483	265	164	21	17	11
Whitecourt #94	1	1	2	5	19	32	116	384	507	23	20	16
Willow Trail #125	0	0	0	0	0	0	0	0	0	0	0	0
Regional School District												
Bonnyville #4	0	1	0	0	23	0	0	471	0	0	20	0
St. Paul #1	1	1	1	36	33	25	653	518	365	18	16	15
School Division												
Bonnyville #46 (1)	8	10	0	142	157	0	2 674	2 667	0	19	17	0
East Smoky #54	7	7	9	83	113	115	1 715	1 889	1 793	21	17	16
Fairview #50	10	8	8	82	88	86	1 608	1 524	1 492	20	17	17

TABLE D1
Schools, Teachers and Students by School District

	SCHOOLS			TEACHERS			STUDENTS			STUDENT/TEACHER RATIO		
	1971	1979	1988	1971	1979	1988	1971	1979	1988	1971	1979	1988
Fort Vermilion #52	7	12	14	90	143	159	1 781	2 499	2 663	20	17	17
High Prairie #48	14	15	12	197	212	211	3 828	3 466	3 350	19	16	16
Lac La Biche #51	8	8	8	114	135	117	2 308	2 272	2 019	20	17	17
Northland #61	29	26	24	132	142	182	2 570	2 564	2 422	19	18	13
Peace River #10	15	13	12	174	162	159	3 307	2 670	2 532	19	16	16
Spirit River #47	10	9	9	105	88	73	2 073	1 592	1 153	20	18	16
Westlock #37	18	11	9	133	130	118	2 811	2 424	2 097	21	19	18
Yellowhead #12	19	17	17	265	304	277	4 994	5 317	4 730	19	17	17
TOTAL	249	246	244	3 117	3 594	3 593	60 093	62 431	59 467	19	17	17
AVERAGE ANNUAL CHANGE (%)		-0.2	-0.1		1.8	0.0		0.5	-0.5		-1.3	0.0
ALBERTA	1 382	1 405	1 719	22 054	23 867	27 136	423 964	420 320	455 959	19	18	17
AVERAGE ANNUAL CHANGE (%)		0.2	2.3		1.0	1.4		-0.1	0.9		-0.6	-0.6
NORTHERN REGION AS % OF ALBERTA	18.0	17.5	14.2	14.1	15.1	13.2	14.2	14.9	13.0	100.0	94.0	100.0

SOURCES:
- Alberta Education, Information Services Branch (1988 District Data)
- Education in Alberta: A Compendium of Education & Social Statistics 1988 Edition (1988 Alberta Totals)
- Trends 1971-79 (1971 and 1979 data)

NOTES:
- Teacher denotes any staff member with a teaching certificate, including administrative staff.
- Student/Teacher ratios have been calculated from the Student and Teacher totals reported in this table.
- The Northern Region is defined as the NADC area but includes 4 school districts that straddle the NADC area boundary: Barrhead, Lac Ste. Anne, Westlock and Yellowhead.
- (1) denotes school districts that were amalgamated into Lakeland school district #5460 in 1981.
- (2) denotes school districts that were amalgamated into North Peace #43 in 1984/85.

TABLE D2
Students Registered at Advanced Education Institutions
(Full-time Equivalent Students)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NADC AREA														
Athabasca University	145	254	363	746	937	1 072	1 339	1 770	1 861	2 330	2 630	3 006	2 909	3 234
Vocational Centres														
AVC Grouard	297	305	341	384	425	372	318	557	584	607	674	696	597	1 025
AVC Lac La Biche	239	244	213	219	236	272	370	463	487	634	774	815	802	984
CVC	0	214	334	245	128	163	220	247	801	540	580	583	517	500
Public Colleges														
Fairview College	223	281	316	375	406	471	571	761	778	873	935	1 106	1 103	1 123
Grande Prairie College	912	763	763	730	624	685	827	954	1 106	1 236	1 352	1 468	1 405	1 458
Keyano College	472	472	447	478	485	534	679	885	955	967	1 038	1 067	1 057	1 215
TOTAL	2 288	2 533	2 777	3 177	3 241	3 569	4 324	5 637	6 572	7 187	7 983	8 741	8 390	9 539
ANNUAL CHANGE (%)		10.7	9.6	14.4	2.0	10.1	21.2	30.4	16.6	9.4	11.1	9.5	-4.0	13.7
ALBERTA	65 715	67 311	69 311	70 252	69 585	71 802	78 092	90 547	96 874	101 159	103 526	107 479	110 869	114 043
ANNUAL CHANGE (%)		2.4	3.0	1.4	-0.9	3.2	8.8	15.9	7.0	4.4	2.3	3.8	3.2	2.9
NADC AREA AS % OF ALBERTA	3.5	3.8	4.0	4.5	4.7	5.0	5.5	6.2	6.8	7.1	7.7	8.1	7.6	8.4

SOURCE:
- Alberta Advanced Education, Research & Information Support Branch

NOTES:
- 1988 figures are estimates.
- Alberta Total includes full-time equivalents for Universities, Public Colleges, Vocational Centres, Technical Institutes, Private Colleges and Hospital Schools.
- The 1975-79 figures differ from the previous Trends document because the previous document included the total number of students, as opposed to full-time equivalents.

TABLE D3
Location of Students Enrolled at Athabasca University by Census Division

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NORTHERN REGION												
CD 12	138	321	317	414	460	550	402	410	468	499	455	536
CD 13	15	36	53	63	113	135	142	201	238	290	220	284
CD 15	68	124	141	223	321	384	433	422	508	562	512	438
TOTAL	221	481	511	700	894	1 069	977	1 033	1 214	1 351	1 187	1 258
ANNUAL CHANGE (%)		*117.6*	*6.2*	*37.0*	*27.7*	*19.6*	*-8.6*	*5.7*	*17.5*	*11.3*	*-12.1*	*6.0*
ALBERTA	847	1 708	2 005	4 077	5 314	6 610	4 805	5 888	7 135	8 070	7 775	8 396
ANNUAL CHANGE (%)		101.7	17.4	103.3	30.3	24.4	-27.3	22.5	21.2	13.1	-3.7	8.0
NORTHERN REGION AS % OF ALBERTA	26.1	28.2	25.5	17.2	16.8	16.2	20.3	17.5	17.0	16.7	15.3	15.0

SOURCE:
- Athabasca University (1983-88)
- Alberta Advanced Education (1977-82)

NOTES:
- Northern Region includes totals for Census Divisions 12, 13 & 15 for all data.
- Athabasca University tracks student populations pre-1986 Census Division boundaries.

TABLE D4
Full-time University Enrolments by Student Origin

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
NORTHERN REGION																	
University of Alberta	1 116	1 015	1 102	1 022	1 041	1 095	1 025	971	922	947	1 079	1 216	1 385	NA	1 724	1 861	2 116
University of Calgary	65	83	89	68	72	54	50	38	129	77	141	168	174	175	201	219	254
University of Lethbridge	8	6	5	12	22	14	18	22	19	20	40	67	84	126	140	135	154
TOTAL	1 189	1 104	1 196	1 102	1 135	1 163	1 093	1 031	1 070	1 044	1 260	1 451	1 643	NA	2 065	2 215	2 524
ANNUAL CHANGE (%)		-7.1	8.3	-7.9	3.0	2.5	-6.0	-5.7	3.8	-2.4	20.7	15.2	13.2	NA	NA	7.3	14.0
ALBERTA																	
University of Alberta	16 185	15 577	16 072	16 704	17 216	17 354	16 843	16 391	15 870	18 273	17 161	18 551	20 016	NA	20 595	20 954	21 821
University of Calgary	8 227	7 761	8 302	8 493	9 714	9 851	9 757	9 742	9 777	10 200	11 175	12 406	13 439	13 981	14 262	14 920	15 614
University of Lethbridge	1 171	1 021	1 017	1 053	1 211	1 318	1 369	1 307	1 289	1 358	1 607	1 996	2 160	2 376	2 396	2 437	2 357
TOTAL	25 583	24 359	25 391	26 250	28 141	28 523	27 969	27 440	26 936	29 831	29 943	32 953	35 615	NA	37 253	38 311	39 792
ANNUAL CHANGE (%)		-4.8	4.2	3.4	7.2	1.4	-1.9	-1.9	-1.8	10.7	0.4	10.1	8.1	NA	NA	2.8	3.9
NADC AREA AS % OF ALBERTA	4.6	4.5	4.7	4.2	4.0	4.1	3.9	3.8	4.0	3.5	4.2	4.4	4.6	NA	5.5	5.8	6.3

SOURCE:
- Information made available by Alberta Advanced Education, Research and Information Support Branch.

NOTES:
- Northern Region data include totals for Census Divisions 12, 13 and 15.
- University student populations are recorded by pre-1986 Census Division boundaries for all years.

TABLE D5
Education Level Attained

	1971	1976	1981	1986
NADC AREA				
Less than Grade 9	45 545	42 855	39 250	34 895
Grades 9-13, No Secondary Certificate	52 445	67 595	64 970	68 335
Grades 9-13, Secondary Certificate	NA	NA	18 740	20 340
Trade Certificate or Diploma	NA	NA	5 650	5 730
Other Non-University without Degree	16 025	20 220	9 170	12 530
Other Non-University with Degree	NA	NA	26 490	33 320
University without Degree	5 710	9 115	10 435	12 515
University with Degree	3 055	5 730	9 885	11 900
AVERAGE ANNUAL CHANGE (%)				
Less than Grade 9		-1.2	-1.7	-2.3
Grades 9-13, No Secondary Certificate		5.2	-0.8	1.0
Grades 9-13, Secondary Certificate		NA	NA	1.7
Trade Certificate or Diploma		NA	NA	0.3
Other Non-University without Degree		4.8	-14.6	6.4
Other Non-University with Degree		NA	NA	4.7
University without Degree		9.8	2.7	3.7
University with Degree		13.4	11.5	3.8
ALBERTA				
Less than Grade 9	258 820	243 440	212 645	192 880
Grades 9-13, No Secondary Certificate	508 225	623 875	532 675	541 825
Grades 9-13, Secondary Certificate	NA	NA	184 780	191 675
Trade Certificate or Diploma	NA	NA	48 520	44 120
Other Non-University without Degree	270 015	237 410	111 825	132 335
Other Non-University with Degree	NA	NA	273 985	309 585
University without Degree	79 180	131 360	148 200	175 320
University with Degree	60 190	98 830	160 000	191 645
AVERAGE ANNUAL CHANGE (%)				
Less than Grade 9		-1.2	-2.7	-1.9
Grades 9-13, No Secondary Certificate		4.2	-3.1	0.3
Grades 9-13, Secondary Certificate		NA	NA	0.7
Trade Certificate or Diploma		NA	NA	-1.9
Other Non-University without Degree		-2.5	-14.0	3.4
Other Non-University with Degree		NA	NA	2.5
University without Degree		10.7	2.4	3.4
University with Degree		10.4	10.1	3.7
NADC AREA AS % OF ALBERTA				
Less than Grade 9	17.6	17.6	18.5	18.1
Grades 9-13, No Secondary Certificate	10.3	10.8	12.2	12.6
Grades 9-13, Secondary Certificate	NA	NA	10.1	10.6
Trade Certificate or Diploma	NA	NA	11.6	13.0
Other Non-University without Degree	5.9	8.5	8.2	9.5
Other Non-University with Degree	NA	NA	9.7	10.8
University without Degree	7.2	6.9	7.0	7.1
University with Degree	5.1	5.8	6.2	6.2

SOURCES:
- Census of Canada (1981 & 1986)
- Census of Canada, General Population, Housing, Household, Family and Labor Force Data (Cat. #95, Vol. 2 (1971) and 3 (1976))

NOTES:
- NADC area data include totals for CDs 12, 13 and 15 for 1971-1981, and CDs 12, 13, 16, 17, 18 & 19 for 1986.
- Data for 1981 and 1986 are adjusted for the NADC boundary; data for 1971 and 1976 are unadjusted.
- Data are collected for people over 15 years of age.
- For 1971 & 1976 Grade 9-13, Other Non-University and Trades Certificate or Diploma data are not dimaggregated by category.

TABLE D6
Degrees, Diplomas and Certificates Granted by Type of Institution

	1980	1981	1982	1983	1984	1985	1986	1987
NADC AREA								
Athabasca University	14	16	21	42	39	46	64	87
Public Colleges								
Fairview	110	107	135	156	176	157	178	172
Grande Prairie	80	89	156	145	210	200	184	216
Keyano	44	54	81	55	86	99	86	89
TOTAL	234	250	372	356	472	456	448	477
Other Institutions	0	0	0	0	0	0	0	0
TOTAL	248	266	393	398	511	502	512	564
ANNUAL CHANGE (%)		7.3	47.7	1.3	28.4	-1.8	2.0	10.2
ALBERTA								
Universities	7 774	7 527	7 803	8 386	8 908	9 570	9 935	10 024
Public Colleges	2 661	2 611	3 382	3 511	4 033	3 980	4 380	4 323
Other	3 764	3 958	4 074	4 430	4 579	4 758	4 851	5 113
TOTAL	14 199	14 096	15 259	16 327	17 520	18 308	19 166	19 460
ANNUAL CHANGE (%)		-0.7	8.3	7.0	7.3	4.5	4.7	1.5
NADC AREA AS % OF ALBERTA								
Universities	0.2	0.2	0.3	0.5	0.4	0.5	0.6	0.9
Public Colleges	8.8	9.6	11.0	10.1	11.7	11.5	10.2	11.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	1.7	1.9	2.6	2.4	2.9	2.7	2.7	2.9

SOURCE:
- Alberta Advanced Education, Research & Information Support Branch

NOTES:
- Alberta Total includes full-time equivalents for Universities, Public Colleges, Technical Institutes and Hospital Schools of Nursing.
- Degrees are not recorded for Alberta Vocational Institutions or Private Colleges by this source.

TABLE D7
French Immersion Program Enrolments by School District

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
NADC AREA											
Bonnyville Regional HS 4	343	71	33	0	0	0	0	0	0	0	0
Bonnyville SD 2665	296	265	288	0	0	0	0	0	0	0	0
County of Athabasca 12	0	0	0	0	0	0	0	0	0	0	21
County of St. Paul 19	306	84	129	147	89	87	103	105	111	172	164
Falher Consolidated SD 69	300	322	254	304	200	207	209	198	202	226	226
Fort McMurray RCSSD 32	0	0	28	120	218	261	322	378	460	445	469
Fort McMurray SD 2833	0	25	48	101	153	201	254	316	352	348	373
Grande Prairie RCSSD 28	0	0	0	38	128	151	184	227	286	297	323
Grande Prairie SD 2357	0	0	0	0	43	73	116	167	235	295	296
High Prairie SD 1220	679	616	664	411	320	420	371	414	236	348	309
Lac La Biche SD 51	0	26	45	53	70	97	101	104	149	169	309
Lakeland RCSSD 150	0	0	0	332	352	391	410	411	490	522	556
Lakeland SD 5460	0	0	0	110	55	112	193	260	40	28	43
McLennan RCSSD 30	70	55	53	52	40	34	37	34	31	36	36
North Peace RCSSD 43	0	0	69	95	118	143	151	172	206	227	244
Peace River Kindergarten Soc.	0	0	0	0	0	50	23	38	46	44	40
Peace River SD 10	0	24	44	64	78	93	109	130	154	191	194
St. Paul Regional SD 1	148	293	75	115	49	90	135	148	185	60	0
St. Paul SD 2228	517	332	322	331	347	324	326	313	306	304	381
Spirit River SD 47	0	48	0	0	0	42	27	16	0	0	0
TOTAL	2 659	2 161	2 052	2 273	2 260	2 776	3 071	3 431	3 489	3 712	3 984
ANNUAL CHANGE (%)		-18.7	-5.0	10.8	-0.6	22.8	10.6	11.7	1.7	6.4	7.3
ALBERTA	7 601	8 642	8 662	11 291	13 131	15 505	17 873	20 270	21 112	23 974	26 186
ANNUAL CHANGE (%)		13.7	0.2	30.4	16.3	18.1	15.3	13.4	4.2	13.6	9.2
NADC AREA AS % OF ALBERTA	35.0	25.0	23.7	20.1	17.2	17.9	17.2	16.9	16.5	15.5	15.2

SOURCE:
- Alberta Education, French Language Services Branch

HEALTH

Introduction

Medical facilities and personnel have increased steadily in the NADC area since the early 1970s. While bed capacity for adults and children rose 12 percent from 1971 to 1986, capacity for newborns fell 5 percent. The number of medical specialists has increased much more rapidly in the NADC area than the number of general practitioners.

E1 Hospital Capacity

There were 29 general or auxiliary hospitals located within the NADC area, with a total capacity in 1986 of 1,479 adult and children patients and 246 newborns. Rated bed capacity for adults and children increased approximately 12 percent, or 154 beds, from 1971 to 1986, while bed capacity for newborns decreased 5 percent, or 12 beds. Eight hospitals closed between 1971 and 1986: Berwyn, Desmarais, Fort Chipewyan, Fox Lake, Grande Prairie Auxiliary, Habay, Whitelaw and one of the Bonnyville facilities. A number of municipalities saw hospital additions or expansions during this period, including the expansion of the Fort McMurray and Grande Prairie hospitals and the addition of hospital facilities in Fox Creek, Grimshaw, High Level and Swan Hills.

E2 Nursing Home Capacity

Nursing home capacity in the NADC area increased between 1981 and 1986 from 531 to a maximum capacity of 556 beds in 1986. The gradual upward trend is indicative of the increase in residents over the age of 65 in the NADC area. Provincial capacity rose at a greater rate over the same period, from 7,255 to 7,808 beds.

E3 Physicians / Dentists

The number of general practitioners in the NADC area has risen steadily from 1976 to 1987, with a slight decline in 1988. The most marked change is found in the 236 percent increase in the number of specialists in the area. This trend towards specialized medical services is also seen in the province as a whole.

The number of dentists in the NADC area has increased 85 percent from 1978 to 1988. The number of dentists in Alberta has risen only 42 percent over the same period.

The steady increase in the number of dentists and general practitioners since 1978 was interrupted in 1988 when their numbers dropped by 4 percent and 3 percent, respectively. On the other hand, the number of dentists and general practitioners in the province as a whole continued to rise in 1988.

Figure E1

Number of Physicians and Dentists in the NADC Area as % of Alberta

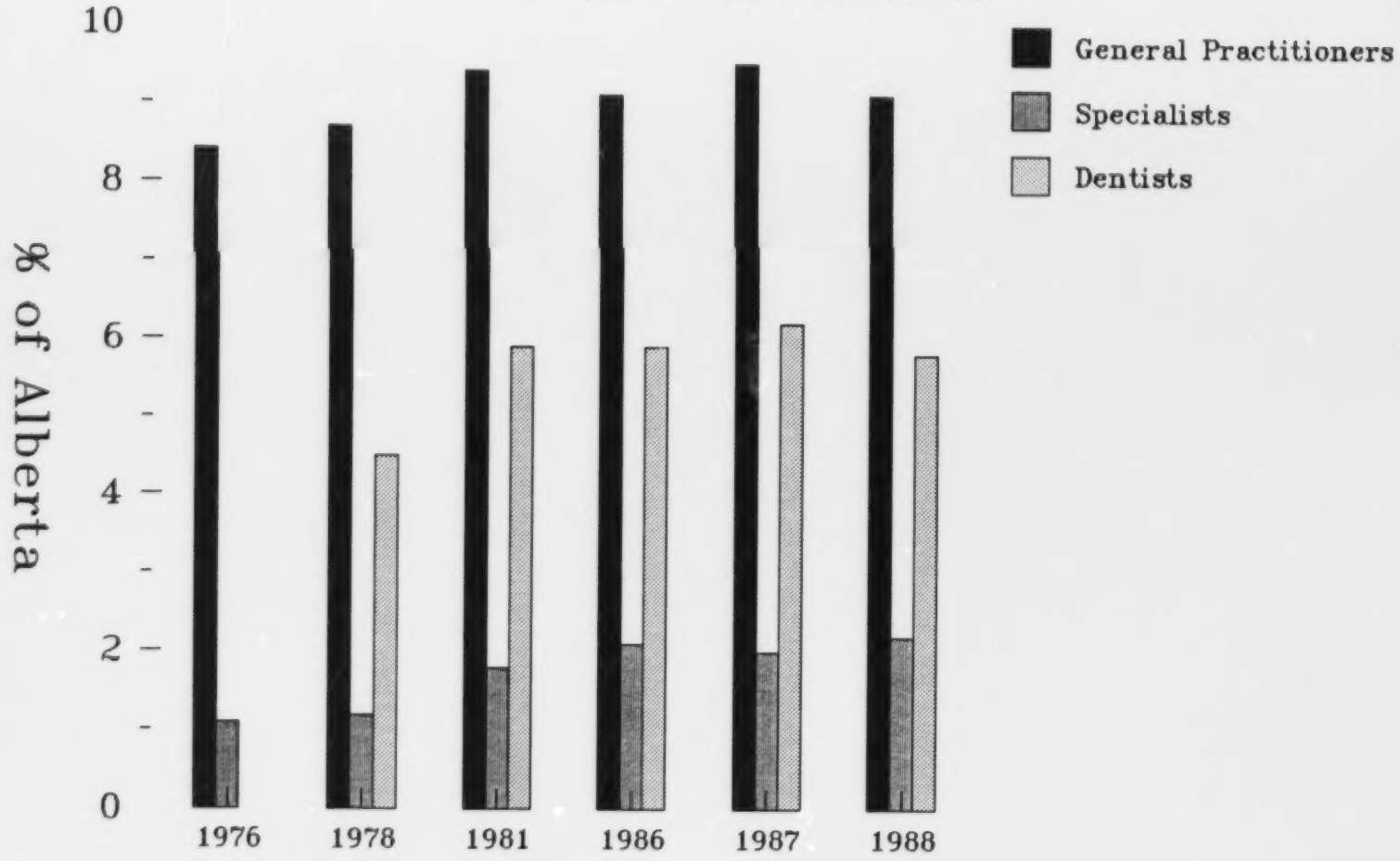


TABLE E1
Adult/Children & Newborn Hospital Capacity
(Rated Bed Capacity)

	ADULTS & CHILDREN				NEWBORNS			
	1971	1979	1981	1986	1971	1979	1981	1986
NADC Area								
Athabasca	45	45	45	42	8	8	8	5
Beaverlodge	30	30	30	30	9	9	9	9
Berwyn	21	21	21	0	5	5	5	0
Bonnyville Duclos	18	18	18	0	4	4	4	0
Bonnyville St. Louis	52	52	60	60	12	12	12	12
Boyle	30	30	30	30	7	7	7	7
Cold Lake	27	27	45	45	8	8	8	8
Desmarais	17	0	0	0	3	0	0	0
Elk Point	51	42	32	32	7	4	4	4
Fairview	50	50	50	50	10	10	10	10
Fort Chipewyan	2	0	0	0	1	0	0	0
Fort McMurray	54	73	142	142	7	14	24	24
Fort Vermilion	36	36	36	36	5	5	5	5
Fox Creek	0	0	10	10	0	0	0	0
Fox Lake	2	0	0	0	2	0	0	0
Glendon	8	8	8	12	7	7	7	2
Grande Cache	34	34	34	34	7	7	7	7
Grande Prairie	130	130	130	238	27	27	27	29
Grande Prairie Auxiliary	50	50	50	0	0	0	0	0
Grimshaw	0	0	0	25	0	0	0	4
Habay	2	0	0	0	1	0	0	0
High Level	0	25	25	25	0	10	10	10
High Prairie	72	72	72	75	16	16	16	16
Hythe	10	10	10	10	3	3	3	3
Lac La Biche	68	68	68	72	14	14	14	6
Manning	34	34	34	34	8	8	8	8
McLennan	59	61	61	61	12	6	6	6
Medley Cold Lake	50	50	50	50	10	10	10	10
Peace River	71	71	71	71	12	12	12	12
Peace River Auxiliary	50	50	50	50	0	0	0	0
Slave Lake	34	34	34	39	7	7	7	7
Spirit River	44	47	47	42	14	8	8	6
St. Paul	75	75	75	75	18	18	18	18
Swan Hills	0	0	0	20	0	0	0	4
Valleyview	30	35	35	35	7	7	7	7
Whitecourt	34	34	34	34	7	7	7	7
Whitelaw	35	35	0	0	0	0	0	0
TOTAL	1 325	1 347	1 407	1 479	258	253	263	246
AVERAGE ANNUAL CHANGE (%)		0.3	0.9	1.0		-0.4	0.8	-1.3
ALBERTA	14 919	15 449	15 584	16 650	1 774	1 681	1 660	1 645
AVERAGE ANNUAL CHANGE (%)		0.7	0.2	1.3		-1.1	-0.3	-0.2
NADC AREA AS % OF ALBERTA	8.9	8.7	9.0	8.9	14.5	15.1	15.8	15.0

SOURCES:
- Alberta Hospitals and Medical Care, Annual Report (1981,1986)
- Trends 1971-79 (1971 & 1979)

NOTES:
- Excludes Auxiliary beds in Public General and Federal General hospitals.
- Number of beds and bassinets as approved by Alberta Hospitals at March 31 in reported year.

TABLE E2
Nursing Home Capacity by Location
(Rated Bed Capacity)

	1971	1976	1981	1986
NADC AREA				
Athabasca	50	50	50	50
Bonnyville	50	50	50	50
Fairview	40	40	40	40
Grande Prairie - Private	88	88	88	88
Grande Prairie - District	50	50	50	50
High Prairie	50	50	52	52
Hythe	0	0	0	25
McLennan	50	50	50	50
Peace River	76	76	76	76
St. Paul	75	75	75	75
TOTAL	529	529	531	556
AVERAGE ANNUAL CHANGE (%)		0.0	0.1	0.9
ALBERTA	5 671	6 869	7 255	7 808
AVERAGE ANNUAL CHANGE (%)		3.9	1.1	1.5
NADC AREA AS % OF ALBERTA	9.3	7.7	7.3	7.1

SOURCE:
- Alberta Hospitals and Medical Care, Annual Reports

NOTE:
- Bed capacity includes the number of beds approved by Alberta Hospitals at March 31 for each year.

TABLE E3
Number of Physicians and Dentists by Type

	1976	1978	1981	1986	1987	1988
NADC AREA						
General Practitioners	116	134	154	187	205	199
Specialists	11	14	22	34	34	37
TOTAL	127	148	176	221	239	236
Dentists	NA	39	56	69	75	72
AVERAGE ANNUAL CHANGE (%)						
General Practitioners		7.5	4.7	4.0	9.6	-2.9
Specialists		12.8	16.3	9.1	0.0	8.8
TOTAL		8.0	5.9	4.7	8.1	-1.3
Dentists		NA	12.8	4.3	8.7	-4.0
ALBERTA						
General Practitioners	1 382	1 537	1 633	2 066	2 158	2 180
Specialists	1 033	1 177	1 247	1 587	1 668	1 718
TOTAL	2 415	2 714	2 880	3 653	3 826	3 898
Dentists	NA	875	952	1 174	1 210	1 241
AVERAGE ANNUAL CHANGE (%)						
General Practitioners		5.5	2.0	4.8	4.5	1.0
Specialists		6.7	1.9	4.9	5.1	3.0
TOTAL		6.0	2.0	4.9	4.7	1.9
Dentists		NA	2.9	4.3	3.1	2.6
NADC AREA AS % OF ALBERTA						
General Practitioners	8.4	8.7	9.4	9.1	9.5	9.1
Specialists	1.1	1.2	1.8	2.1	2.0	2.2
TOTAL	5.3	5.5	6.1	6.0	6.2	6.1
Dentists	NA	4.5	5.9	5.9	6.2	5.8

SOURCES:
- Alberta Health, Health Economics & Statistics (1976, 1981, 1986-88)
- Trends 1971-79 (1978)

NOTES:
- Alberta Health data based on Census Division adjusted to the NADC area.
- Data include practitioners who received at least one fee-for-service payment from the AHCI plan during the year ending December 31.

FAMILY AND SOCIAL SERVICES

Introduction

Family and social services programs are administered throughout the NADC area by 13 Alberta Social Services District offices. Caseloads for assistance are categorized under two main areas: employable and unemployable, the latter of which contains six sub-categories. Since 1980, the number of public assistance cases in the NADC area has more than doubled. Child welfare cases rose in 1989 after decreasing during the previous two years. Alcohol- and drug-abuse education and prevention sessions in the northern region have decreased for most program types over the past five years. In contrast, sessions for the province as a whole have increased for all but two program types.

F1 Public Assistance Caseload by Reason for Assistance

Highlights

- In 1988, 64 percent of all cases in the northern region fell within the unemployable category. 58 percent of these unemployable cases were classified as single parents.
- The only two unemployable sub-categories in the northern region to show a significant decline from 1975 to 1988 were the "mental ill health" and the "age 60+" sub-categories.

F2 Public Assistance Caseload by Social Services District Office

Highlights

- Monthly average caseloads in the NADC area increased from 3,548 in 1980 to 7,014 in 1989.
- The most dramatic annual increase in the past 18 years was in 1983 when the caseload in the NADC area increased 51 percent over the previous year.
- In the NADC area from 1986 to 1988, caseload increases exceeded 10 percent. In 1989, caseloads decreased by 6 percent.
- The NADC area now accounts for 10.4 percent of the provincial caseload, almost 10 percent less than the peak in 1977 of 19.7 percent of Alberta's total public assistance cases.

F3 Active Child Welfare Cases

Highlights

- Total cases increased to over 2,300 by 1989 in the northern region.
- 22 percent of cases in the northern region in 1989 were for placement into foster homes, only slightly higher than the proportion of foster home cases for the province (18 percent).
- Almost 25 percent of the provincial cases to place children in relative's care in 1989 were in the northern region.

F4 AADAC Alcohol and Drug Abuse Education and Prevention Sessions

Highlights

- There are seven program types used to deliver alcohol- and drug-abuse education in Alberta.
- School sessions increased 34 percent from 1987 to 1988 in the northern region and then decreased 37 percent by 1989.
- Media sessions in the northern region decreased by 58 percent between 1984 and 1989.
- The northern region now receives over 50 percent of AADAC's social services sessions but only 11 percent of AADAC's media sessions.

Figure F1

Average Annual Public Assistance Caseload

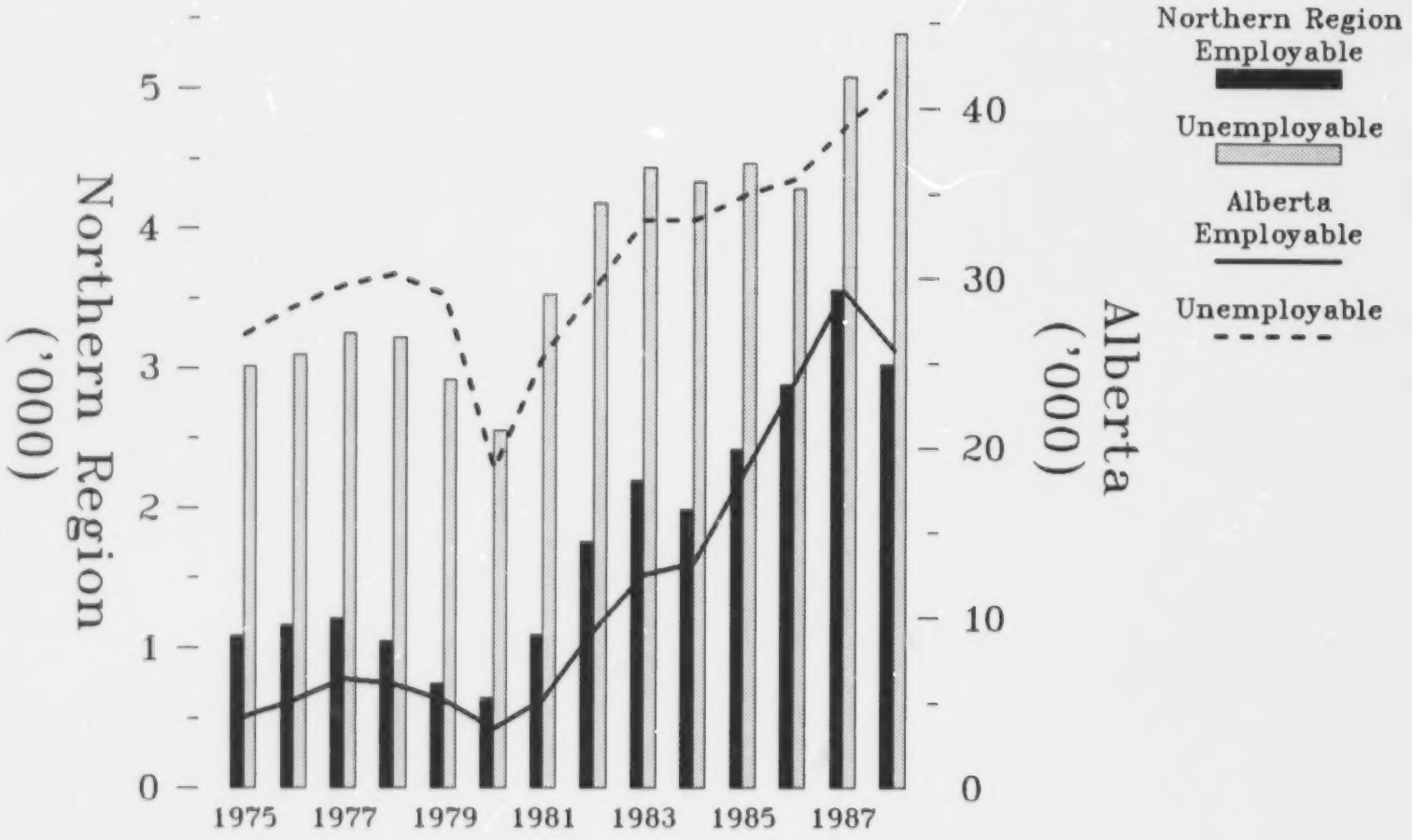


Figure F2

Northern Region Public Assistance Caseloads by Reason for Assistance

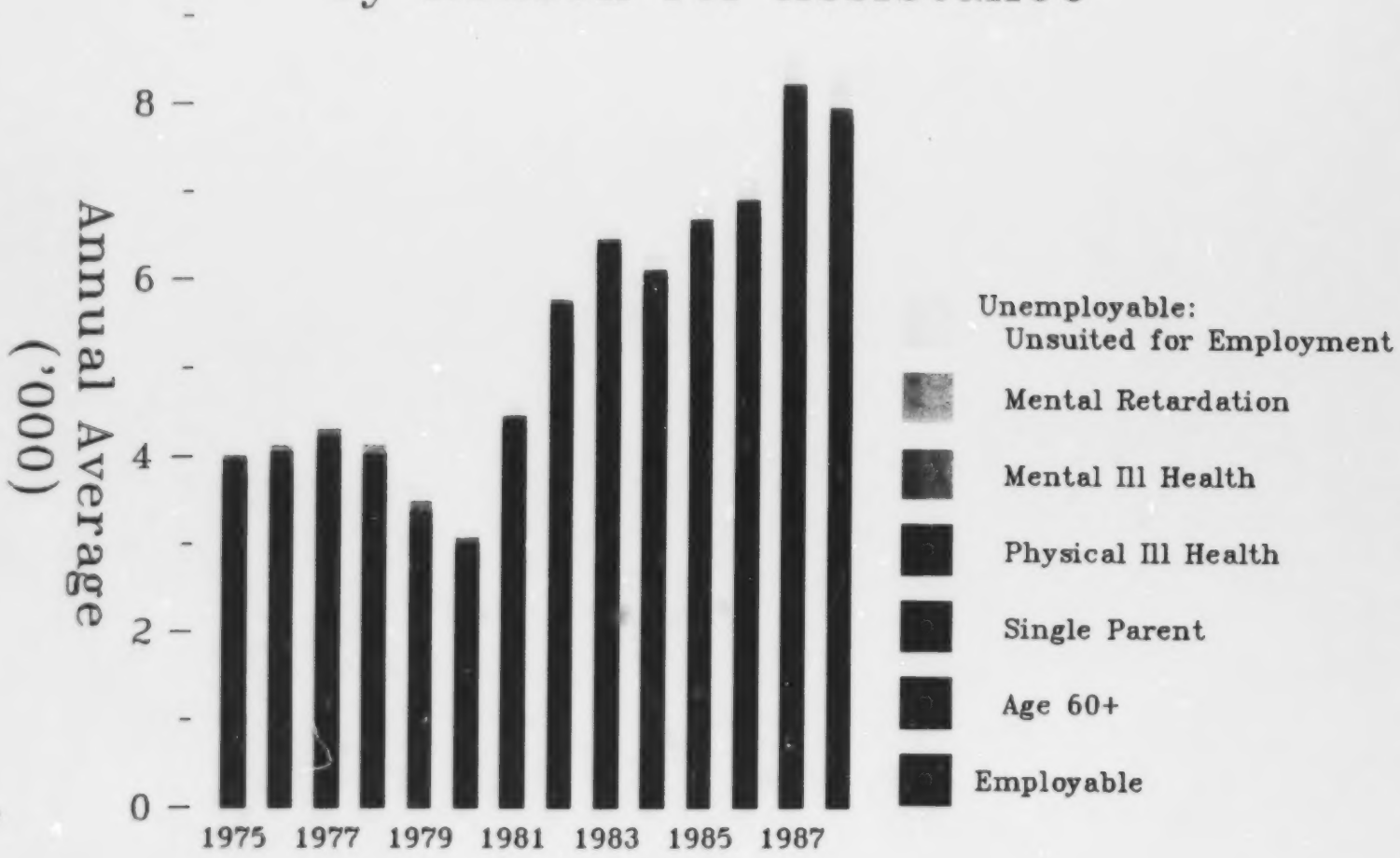


TABLE F1
Public Assistance Caseload by Reason for Assistance
(Annual Average)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NORTHERN REGION														
Employable	1 085	1 161	1 210	1 046	743	644	1 096	1 756	2 197	1 987	2 425	2 890	3 571	3 034
Unemployable	3 011	3 094	3 252	3 221	2 915	2 557	3 533	4 184	4 442	4 341	4 475	4 293	5 091	5 398
Age 60+	956	814	713	681	597	515	588	663	531	419	409	421	431	439
Single Parent	960	1 091	1 252	1 300	1 120	1 091	1 684	2 087	2 336	2 327	2 476	2 615	2 944	3 151
Physical Ill Health	802	841	911	852	768	675	972	1 132	1 263	1 233	1 184	803	1 109	1 175
Mental Ill Health	161	150	139	154	150	86	79	86	89	108	115	112	111	82
Mental Retardation	44	70	95	111	111	67	53	52	49	61	79	74	79	88
Unsuited For Employment	88	128	142	123	169	123	157	164	174	193	212	268	417	463
TOTAL	4 096	4 255	4 462	4 267	3 658	3 201	4 629	5 940	6 639	6 328	6 900	7 183	8 662	8 432
ANNUAL CHANGE (%)														
Employable		7.0	4.2	-13.6	-29.0	-13.3	70.2	60.2	25.1	-9.6	22.0	19.2	23.6	-15.0
Unemployable		2.8	5.1	-1.0	-9.5	-12.3	38.2	18.4	6.2	-2.3	3.1	-4.1	18.6	6.0
Age 60+		-14.9	-12.4	-4.5	-12.3	-13.7	14.2	12.8	-19.9	-21.1	-2.4	2.9	2.4	1.9
Single Parent		13.6	14.8	3.8	-13.8	-2.6	54.4	23.9	11.9	-0.4	6.4	5.6	12.6	7.0
Physical Ill Health		4.9	8.3	-6.5	-9.9	-12.1	44.0	16.5	11.6	-2.4	-4.0	-32.2	38.1	6.0
Mental Ill Health		-6.8	-7.3	10.8	-2.6	-42.7	-8.1	8.9	3.5	21.3	6.5	-2.6	-0.9	-26.1
Mental Retardation		59.1	35.7	16.8	0.0	-39.6	-20.9	-1.9	-5.8	24.5	29.5	-6.3	6.8	11.4
Unsuited For Employment		45.5	10.9	-13.4	37.4	-27.2	27.6	4.5	6.1	10.9	9.8	26.4	55.6	11.0
TOTAL		3.9	4.9	-4.4	-14.3	-12.5	44.6	28.3	11.8	-4.7	9.0	4.1	20.6	-2.7
ALBERTA														
Employable	4 212	5 138	6 410	6 118	5 181	3 495	5 218	9 308	12 558	13 206	18 466	23 851	29 320	25 829
Unemployable	26 654	28 267	29 554	30 208	29 000	18 789	25 403	29 391	33 403	33 432	34 921	35 829	38 857	41 586
Age 60+	6 490	5 876	5 477	5 311	4 816	2 766	3 291	3 386	3 536	3 326	3 307	3 276	3 477	3 682
Single Parent	11 443	12 752	14 059	14 795	13 790	9 841	13 824	16 378	18 695	18 586	19 838	20 869	22 932	23 973
Physical Ill Health	5 730	6 185	6 374	6 147	6 157	4 251	6 088	7 236	8 531	8 591	8 600	8 191	8 314	9 137
Mental Ill Health	2 051	2 089	1 961	1 967	1 930	990	1 178	1 320	1 553	1 690	1 753	1 661	1 602	1 656
Mental Retardation	316	706	873	1 069	1 269	392	313	287	292	331	366	358	367	401
Unsuited For Employment	424	659	810	919	1 038	549	709	784	796	908	1 057	1 474	2 145	2 737
TOTAL	30 866	33 405	35 964	36 326	34 181	22 284	30 621	38 699	45 961	46 638	53 387	59 680	68 177	67 415
ANNUAL CHANGE (%)														
Employable		22.0	24.8	-4.6	-15.3	-32.5	49.3	78.4	34.9	5.2	39.8	29.2	22.9	-11.9
Unemployable		6.1	4.6	2.2	-4.0	-35.2	35.2	15.7	13.7	0.1	4.5	2.6	8.5	7.0
Age 60+		-9.5	-6.8	-3.0	-9.3	-42.6	19.0	2.9	4.4	-5.9	-0.6	-0.9	6.1	5.9
Single Parent		11.4	10.2	5.2	-6.8	-28.6	40.5	18.5	14.1	-0.6	6.7	5.2	10.0	4.4
Physical Ill Health		7.9	3.1	-3.6	0.2	-31.0	43.2	18.9	17.9	0.7	0.1	-4.8	1.5	9.9
Mental Ill Health		1.9	-6.1	0.3	-1.9	-48.7	19.0	12.1	17.7	8.8	3.7	-5.2	-3.6	3.4
Mental Retardation		36.8	23.7	22.5	18.7	-69.1	-20.2	-8.3	1.7	13.4	10.6	-2.2	2.5	9.3
Unsuited For Employment		55.4	22.9	13.5	12.9	-47.1	29.1	10.6	1.5	14.1	16.4	39.5	45.5	27.6
TOTAL		8.2	7.7	1.0	-5.9	-34.8	37.4	26.4	18.8	1.5	14.5	11.8	14.2	-1.1
NORTHERN REGION AS % OF ALBERTA														
Employable	25.8	22.6	18.9	17.1	14.3	18.4	21.0	18.9	17.5	15.0	13.1	12.1	12.2	11.7
Unemployable	11.3	10.9	11.0	10.7	10.1	13.6	13.9	14.2	13.3	13.0	12.8	12.0	13.1	13.0
Age 60+	14.7	13.9	13.0	12.8	12.4	18.6	17.9	19.6	15.0	12.6	12.4	12.9	12.4	11.9
Single Parent	8.4	8.6	8.9	8.8	8.1	11.1	12.2	12.7	12.5	12.5	12.5	12.5	12.8	13.1
Physical Ill Health	14.0	13.6	14.3	13.9	12.5	15.9	16.0	15.6	14.8	14.4	13.8	9.8	13.3	12.9
Mental Ill Health	7.8	7.2	7.1	7.8	7.8	8.7	6.7	6.5	5.7	6.4	6.6	6.7	6.9	5.0
Mental Retardation	8.5	9.9	10.9	10.4	8.7	17.1	16.9	18.1	16.8	18.4	21.6	20.7	21.3	21.9
Unsuited For Employment	20.8	19.4	17.5	13.4	16.3	22.4	22.1	20.9	21.9	21.3	20.1	18.2	19.4	16.9
TOTAL	13.3	12.7	12.4	11.7	10.7	14.4	15.1	15.3	14.4	13.6	12.9	12.0	12.7	12.5

SOURCES:
- Alberta Social Services (1980-88)
- Trends 1971-79 (1975-79)

NOTES:
- Northern Region includes the northwest and northeast regional areas as defined by Alberta Social Services. The Northern Region extends beyond the NADC boundary.
- Data are reported by fiscal year (April 1 to March 31 of listed year).
- Data for 1975 to 1979 are reported for the month of March; data for 1980 to 1988 are annual averages.
- Caseload is not equivalent to the number of recipients. There is an average of approximately 2.1 recipients per case in Alberta.

TABLE F2
Public Assistance Caseload
by Social Services District Office
(Monthly Average)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
NADC AREA																		
Athabasca	241	225	213	205	221	199	188	179	177	139	166	305	315	352	324	318	410	416
Bonnyville	314	321	302	313	305	320	336	320	334	328	371	682	546	256	279	322	396	329
Fort McMurray	118	174	198	168	198	198	225	248	244	285	297	527	420	529	530	547	575	553
Grande Cache	28	38	40	39	68	73	72	75	57	65	54	112	89	81	92	84	116	104
Grand Centre	0	0	0	0	0	0	0	0	0	0	0	0	0	208	241	260	272	271
Grande Prairie	862	875	908	960	1 066	1 112	1 057	878	825	826	1 022	1 534	1 367	1 422	1 665	1 916	2 020	1 917
High Level	156	165	171	169	209	214	226	198	205	206	270	290	212	210	257	283	336	338
High Prairie	0	0	493	488	479	461	502	424	402	374	390	525	494	427	495	669	670	654
Lac La Biche	370	341	366	399	438	452	454	392	359	346	301	359	376	446	456	511	700	654
Peace River	485	390	373	336	365	391	418	340	325	322	356	618	493	535	603	767	907	746
Slave Lake	0	0	264	301	396	485	456	283	224	220	271	365	250	257	296	335	336	354
St. Paul	283	288	295	299	321	323	332	293	271	233	236	294	232	267	252	242	335	352
Whitecourt	150	136	124	122	154	155	184	143	125	146	151	255	231	277	332	346	381	326
TOTAL	3 007	2 953	3 747	3 799	4 220	4 383	4 450	3 773	3 548	3 490	3 885	5 866	5 025	5 267	5 822	6 600	7 454	7 014
ANNUAL CHANGE (%)		-1.8	26.9	1.4	11.1	3.9	1.5	-15.2	-6.0	-1.6	11.3	51.0	-14.3	4.8	10.5	13.4	12.9	-5.9
ALBERTA	30 866	33 405	35 964	36 326	34 181	22 284	30 621	38 699	45 961	46 638	53 387	59 680	68 177	67 415	54 867	62 813	68 015	67 731
ANNUAL CHANGE (%)		8.2	7.7	1.0	-5.9	-34.8	37.4	26.4	18.8	1.5	14.5	11.8	14.2	-1.1	-18.6	14.5	8.3	-0.4
NADC AREA AS % OF ALBERTA	9.7	8.8	10.4	10.5	12.3	19.7	14.5	9.7	7.7	7.5	7.3	9.8	7.4	7.8	10.6	10.5	11.0	10.4

SOURCES:
- Alberta Social Services (1981-88)
- Trends 1971-79 (1971-80)

NOTES:
- Average monthly public assistance caseload is calculated by averaging monthly caseloads.
- The Grande Centre office was opened in 1984. The people in this area had previously been administered by the Bonnyville office.
- Data are reported by fiscal year: April 1 of the previous year to March 31 of the year listed.
- Caseload is not equivalent to the number of recipients. There is an average of approximately 2.1 recipients per case in Alberta.

TABLE F3
Active Child Welfare Cases by Category
(As of March 31)

	1986	1987	1988	1989
NORTHERN REGION				
Parental Care	303	351	313	371
Relatives' Care	43	44	38	45
Group Home	72	73	72	65
Residential Resource	66	72	45	67
Compulsory Care	3	1	0	1
Adoption Home	21	25	30	19
Detention	2	2	1	1
Foster Home	601	559	476	506
Other	43	63	65	61
Not Coded	1 244	928	1 029	1 199
TOTAL	2 398	2 118	2 069	2 335
ANNUAL CHANGE (%)				
Parental Care		15.8	-10.8	18.5
Relatives' Care		2.3	-13.6	18.4
Group Home		1.4	-1.4	-9.7
Residential Resource		9.1	-37.5	48.9
Compulsory Care		-66.7	-100.0	NA
Adoption Home		19.0	20.0	-36.7
Detention		0.0	-50.0	0.0
Foster Home		-7.0	-14.8	6.3
Other		46.5	3.2	-6.2
Not Coded		-25.4	10.9	16.5
TOTAL		-11.7	-2.3	12.9
ALBERTA				
Parental Care	1 582	2 870	3 507	3 788
Relatives' Care	141	143	133	181
Group Home	399	427	438	480
Residential Resource	467	430	453	481
Compulsory Care	15	8	6	7
Adoption Home	206	195	202	168
Detention	7	7	7	9
Foster Home	2 434	2 443	2 300	2 312
Other	322	422	353	355
Not Coded	5 744	4 298	4 547	3 126
TOTAL	11 317	11 263	11 966	12 907
ANNUAL CHANGE (%)		-0.5	6.2	7.9
NORTHERN REGION AS % OF ALBERTA				
Parental Care	19.2	12.2	8.9	9.8
Relatives' Care	30.5	30.8	24.8	24.9
Group Home	18.0	17.1	16.4	13.5
Residential Resource	14.1	16.0	9.9	13.9
Compulsory Care	20.0	12.5	0.0	14.3
Adoption Home	10.2	12.8	14.9	11.3
Detention	28.6	28.6	14.3	11.1
Foster Home	24.7	22.9	20.7	21.9
Other	13.4	14.9	18.4	17.2
Not Coded	21.7	21.6	22.6	23.4
TOTAL	21.2	18.8	17.3	18.1

SOURCE:
- Alberta Family & Social Services, Child Welfare Services

NOTES:
- Northern Region includes totals for the northwest and northeast regional areas as defined by Alberta Social Services. The Northern Region extends beyond the NADC boundary.
- The 1986 data are reported at May 31 instead of March 31.
- Cases include Handicapped Children's Services.

TABLE F4
AADAC Alcohol and Drug Abuse Education and Prevention Sessions by Type of Program
(Sessions)

	1984	1985	1986	1987	1988	1989
NORTHERN REGION						
Schools	934	1137	1012	849	1134	715
Occupational/Professional	72	123	81	153	116	92
Health Services	44	43	53	79	69	56
Social Services	126	263	197	266	209	181
Community	435	594	482	424	426	427
Media	60	56	71	28	33	25
Legal System	76	88	77	78	54	48
ANNUAL CHANGE (%)						
Schools		21.7	-11.0	-16.1	33.6	-36.9
Occupational/Professional		70.8	-34.1	88.9	-24.2	-20.7
Health Services		-2.3	23.3	49.1	-12.7	-18.8
Social Services		108.7	-25.1	35.0	-21.4	-13.4
Community		36.6	-18.9	-12.0	0.5	0.2
Media		-6.7	26.8	-60.6	17.9	-24.2
Legal System		15.8	-12.5	1.3	-30.8	-11.1
ALBERTA						
Schools	1744	1987	2105	2052	2244	1881
Occupational/Professional	394	1009	749	503	482	428
Health Services	143	168	186	158	187	245
Social Services	255	409	329	461	338	340
Community	1008	1543	1281	1115	1283	1187
Media	432	247	215	179	293	231
Legal System	154	222	135	143	115	124
ANNUAL CHANGE (%)						
Schools		13.9	5.9	-2.5	9.4	-16.2
Occupational/Professional		156.1	-25.8	-32.8	-4.2	-11.2
Health Services		17.5	10.7	-15.1	18.4	31.0
Social Services		60.4	-19.6	40.1	-26.7	0.6
Community		53.1	-17.0	-13.0	15.1	-7.5
Media		-42.8	-13.0	-16.7	63.7	-21.2
Legal System		44.2	-39.2	5.9	-19.6	7.8
NORTHERN REGION AS % OF ALBERTA						
Schools	53.6	57.2	48.1	41.4	50.5	38.0
Occupational/Professional	18.3	12.2	10.8	30.4	24.1	21.5
Health Services	30.8	25.6	28.5	50.0	36.9	22.9
Social Services	49.4	64.3	59.9	57.7	61.8	53.2
Community	43.2	38.5	37.6	38.0	33.2	36.0
Media	13.9	22.7	33.0	15.6	11.3	10.8
Legal System	49.4	39.6	57.0	54.5	47.0	38.7

SOURCE:
- Alberta Alcohol and Drug Abuse Commission, Community Education Services Information System

NOTES:
- Northern Region data include totals for AADAC Field Services Northern Division.
- Data are reported by fiscal year: from April 1 of the previous year to March 31 of the year listed.

JUSTICE

Introduction

Economic growth in the NADC area has been accompanied, for the most part, by a rise in the crime rate. Criminal code offences comprise crimes of violence, property crimes, and crimes such as prostitution, gaming and betting, and use of offensive weapons. Unlike other crime statistics categories such as federal drugs, provincial statutes, traffic and municipal bylaws, criminal code offences are considered to be the least subject to police enforcement.

G1/G2 Criminal Code Offences

Highlights

- Criminal code offences for all municipalities in the NADC area have risen from 13,494 per 100,000 in 1977 to 17,050 per 100,000 in 1986.
- The Lac La Biche RCMP jurisdiction had the highest criminal code offence rate: over 44,000 per 100,000 in 1986.
- Significant offence rate increases occurred between 1977 and 1986 in most municipal jurisdictions in the NADC area except for Fort McMurray, Grande Cache, Peace River, Slave Lake, Swan Hills and Valleyview.

G3 RCMP Officers by Municipal Jurisdiction

Highlights

- In 1987, 164 RCMP officers were stationed in the NADC area in 18 municipal jurisdictions.
- The number of officers in the NADC area increased 29 percent between 1980 and 1987.
- The largest proportion (45.7 percent) of officers in the NADC area in 1987 were stationed in Fort McMurray and Grande Prairie.

Figure G1

Criminal Code Offence Rate by Type of Offence for the NADC Area

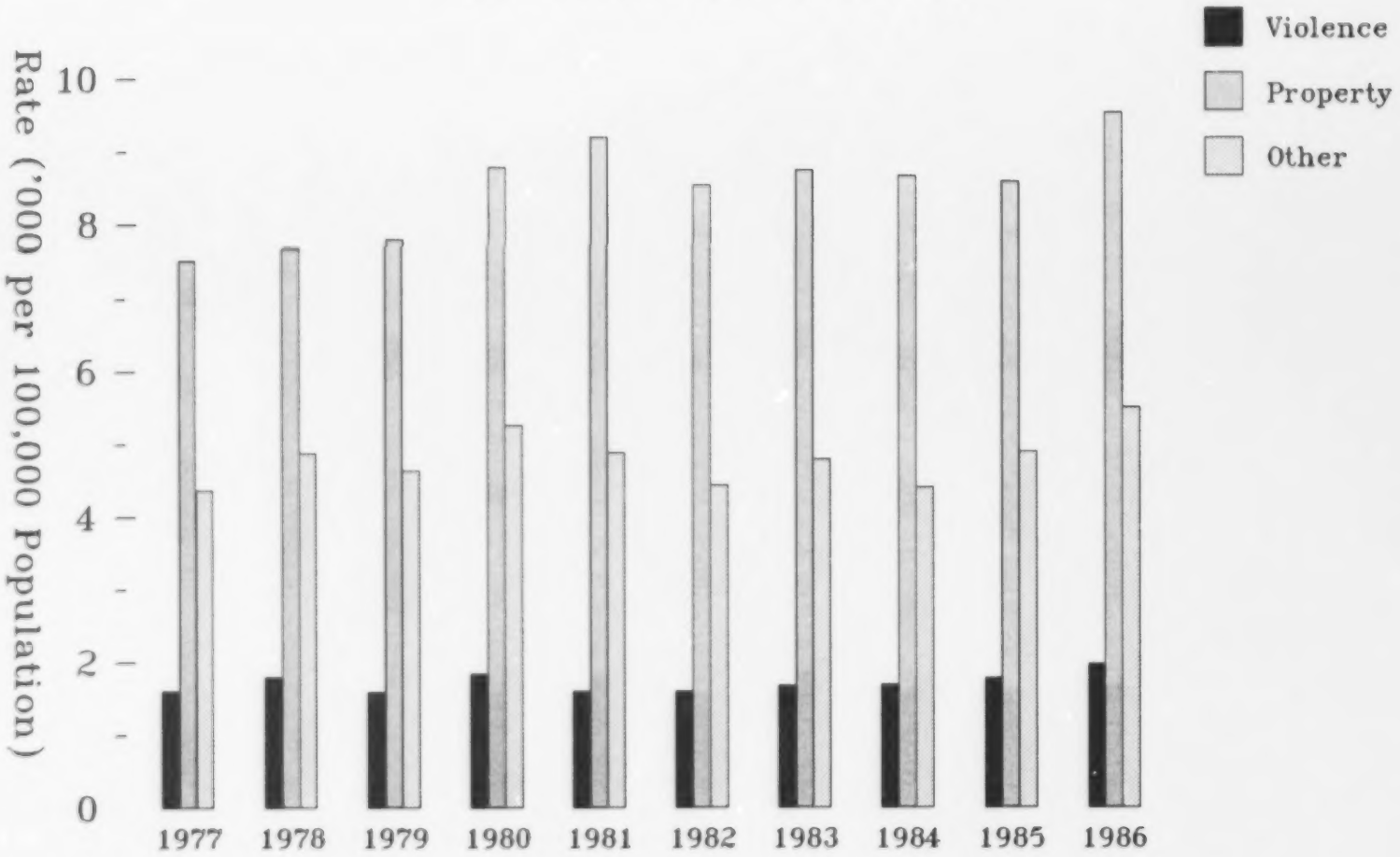


TABLE G1
Criminal Code Offence Rate by Type of Offence
(per 100,000 population)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
NADC AREA (Urban)										
Violence	1 608	1 795	1 590	1 839	1 599	1 597	1 674	1 686	1 782	1 972
Property	7 520	7 693	7 794	8 784	9 200	8 558	8 761	8 680	8 608	9 572
Other	4 366	4 871	4 623	5 250	4 886	4 436	4 788	4 413	4 900	5 506
TOTAL	13 494	14 359	14 007	15 873	15 685	14 591	15 223	14 780	15 289	17 050
ANNUAL CHANGE (%)										
Violence		11.6	-11.4	15.7	-13.1	-0.1	4.8	0.8	5.7	10.7
Property		2.3	1.3	12.7	4.7	-7.0	2.4	-0.9	-0.8	11.2
Other		11.6	-5.1	13.6	-6.9	-9.2	7.9	-7.8	11.0	12.4
TOTAL		6.4	-2.5	13.3	-1.2	-7.0	4.3	-2.9	3.4	11.5
ALBERTA (Rural and Urban)										
Violence	793	778	784	821	834	862	821	822	882	918
Property	5 793	5 486	5 747	6 418	6 869	6 726	6 314	5 629	5 584	6 311
Other	2 384	2 209	2 364	2 532	2 586	2 373	2 315	2 224	2 294	2 505
TOTAL	8 970	8 473	8 895	9 771	10 290	9 961	9 450	8 676	8 760	9 733
ANNUAL CHANGE (%)										
Violence		-1.9	0.8	4.7	1.6	3.4	-4.8	0.1	7.3	4.1
Property		-5.3	4.8	11.7	7.0	-2.1	-6.1	-10.8	-0.8	13.0
Other		-7.3	7.0	7.1	2.1	-8.2	-2.4	-3.9	3.1	9.2
TOTAL		-5.5	5.0	9.8	5.3	-3.2	-5.1	-8.2	1.0	11.1

SOURCE:
- Statistics Canada, Canadian Crime Statistics (Cat # 85-205)

NOTES:
- NADC area data are reported for RCMP urban municipal police jurisdictions listed in Table G2.
- Alberta totals include urban and rural jurisdictions.
- Definitions of sub-categories of criminal code offences:

Crimes of violence:	homicides, attempted murder, sexual offences, assaults and robbery
Property crimes:	theft and frauds
Other crimes:	prostitution, gaming and betting, offensive weapons, and other criminal code offences

TABLE G2
Criminal Code Offence Rate
by RCMP Municipal Jurisdiction
(per 100,000 population)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
NADC AREA	(Urban)									
Athabasca	12 444	10 611	7 778	8 473	8 789	8 909	10 043	10 368	12 650	14 211
Bonnyville	14 207	16 064	15 193	16 358	17 162	18 818	20 159	19 900	17 940	19 231
Fairview	7 360	9 107	9 428	9 333	14 033	13 093	11 531	9 172	8 457	11 063
Fort McMurray	16 224	11 409	11 319	14 441	11 013	11 524	11 194	9 716	11 333	10 361
Fox Creek	10 235	9 222	8 722	10 388	13 500	9 950	9 150	11 800	10 250	11 200
Grande Cache	16 545	11 431	9 613	14 342	12 000	1 047	7 720	7 478	7 960	10 800
Grand Centre	10 545	14 966	18 733	19 366	19 733	18 451	19 710	16 698	18 125	17 914
Grande Prairie	12 213	12 478	15 119	16 848	17 876	13 952	13 815	12 921	15 061	16 809
Grimshaw	7 117	9 555	7 888	12 050	8 772	9 500	10 360	11 400	8 760	8 154
High Level	9 666	11 478	11 652	18 200	19 260	21 869	25 417	16 815	17 500	20 250
High Prairie	17 586	30 608	21 739	27 391	20 241	18 903	22 160	22 269	24 769	31 385
Lac La Biche	22 579	18 100	20 000	18 350	23 150	26 090	25 826	33 667	30 682	44 238
Peace River	13 844	12 288	12 807	15 280	16 543	17 210	17 554	12 450	11 883	11 875
Slave Lake	15 971	14 583	16 555	16 921	16 232	14 574	13 217	12 891	16 563	15 655
St. Paul	13 818	18 000	15 111	17 088	15 490	14 188	16 736	19 900	21 157	22 275
Swan Hills	7 739	11 208	11 041	9 846	10 500	7 440	6 160	5 600	6 720	6 720
Valleyview	15 [illegible]	22 350	25 000	25 722	23 809	25 571	21 667	20 045	17 727	18 628
Whitecourt	15 189	15 000	14 431	15 320	14 222	11 553	11 600	12 950	17 667	16 130
AVERAGE	13 494	14 359	14 007	15 873	15 685	14 591	15 223	14 780	15 289	17 050
ANNUAL CHANGE (%)		6.4	-2.4	13.3	-1.2	-7.0	4.3	-2.9	3.4	11.5
ALBERTA	(Urban and Rural)									
	8 970	8 474	8 896	9 772	10 290	9 961	9 450	8 676	8 760	9 733
ANNUAL CHANGE (%)		-5.5	5.0	9.8	5.3	-3.2	-5.1	-8.2	1.0	11.1

SOURCE:
- Statistics Canada, Enforcement Statistics (Cat # 85-205)

NOTES:
- Includes criminal code offences described in Table G1.
- NADC area data are reported for RCMP urban municipal jurisdictions; Alberta data are reported for urban and rural jurisdictions.

TABLE G3
RCMP Officers
by Municipal Jurisdiction

	1980	1981	1982	1983	1984	1985	1986	1987
NADC AREA	(Urban)							
Athabasca	3	4	4	4	4	4	4	4
Bonnyville	5	6	7	8	8	8	9	9
Fairview	3	3	4	4	4	4	4	4
Fort McMurray	30	33	33	33	38	37	43	43
Fox Creek	2	2	2	2	4	4	3	3
Grande Cache	5	7	6	6	6	8	6	6
Grand Centre	4	5	6	6	5	5	5	5
Grande Prairie	26	31	33	32	57	30	31	32
Grimshaw	2	2	3	3	3	3	3	3
High Level	3	4	4	5	11	10	6	6
High Prairie	6	6	6	6	6	6	6	6
Lac La Biche	5	5	5	5	5	5	5	5
Peace River	7	8	8	8	7	8	9	8
Slave Lake	6	6	7	7	6	6	7	7
St. Paul	7	7	7	8	8	8	8	8
Swan Hills	3	3	3	3	7	3	3	3
Valleyview	3	3	4	4	5	5	5	5
Whitecourt	7	8	8	8	6	6	7	7
TOTAL	127	143	150	152	190	160	164	164
ANNUAL CHANGE (%)		12.6	4.9	1.3	25.0	-15.8	2.5	0.0
ALBERTA	(Urban and Rural)							
	3 977	4 455	4 648	4 572	4 579	4 445	4 469	4 305
ANNUAL CHANGE (%)		12.0	4.3	-1.6	0.2	-2.9	0.5	-3.7

SOURCE:
- Alberta Solicitor General, Law Enforcement Division

NOTE:
- NADC totals include only RCMP contracts for urban municipalities; Alberta totals include urban and rural jurisdictions.

UTILITIES

Introduction

The NADC area's utilities (e.g., electric energy, water movement) are primarily consumed by the industrial sector. Electric energy generation reached a 17-year maximum of 941 gigawatt hours in 1987. Water consumption from the three main river basins in the NADC area constituted over 50 percent of the provincial industrial total in 1986.

H1 Net Electric Energy Generation by Plant

Highlights

- Five major and eight minor plants produce energy in the NADC area.
- Three major industrial operations in the NADC area produce energy for their own consumption.
- Electric generation produced by the 13 non-industrial plants in the NADC area rose to 941 gigawatt hours by 1987, almost 3 percent of the provincial total.
- The second-highest output generated by NADC area plants from 1971 to 1987 was 906 gigawatt hours in 1973.

H2 Off-Site Electric Energy Demand

Two major suppliers of energy are located in the NADC area: Alberta Power and Transalta Utilities, supplying 4,587 gigawatt hours, or 12.7 percent of the total demand in the province in 1988. The demand for electric energy has been increasing steadily in the NADC area with total demand up 146 percent since 1977.

H3 Water Use by River Basin

Highlights

- The three main river basins in the NADC area are the Athabasca, Beaver and Peace River basins.
- Between 1971 and 1986, water diversion increased 46 percent in the NADC area.
- In the NADC area, water consumption rose 6 percent between 1971 and 1986 but there was a dramatic decrease from 1981 to 1986 of 16 percent.
- There was an increase of 264 percent in diversion in the Beaver River Basin and an increase of 415 percent in consumption from 1971 to 1986.
- The Athabasca River Basin experienced a drop in consumption of 13 percent between 1971 and 1986.

H4 Water Consumption and Diversion by Sector

Industrial water consumption in the northern region resumed its moderate level (46 700 cubic decametres) in 1986 after a peak level of 64 000 in 1981. Northern region industrial consumption represented 53 percent of the provincial industrial consumption, and northern region oil and gas consumption represented 58 percent of the provincial consumption in 1986. The majority of northern region water diversion activity (63 percent) was seen in the industrial sector in 1986. Traditionally, the industrial and oil and gas sectors in the northern region are responsible for more than one-half of the diversion in the province. From 1971 to 1986, the diversion expended on oil and gas declined (37 percent) with a corresponding increase (81 percent) in the industrial sector.

Figure H1

River Basins in the NADC Area

Figure H2

Electric Energy Generation and Demand

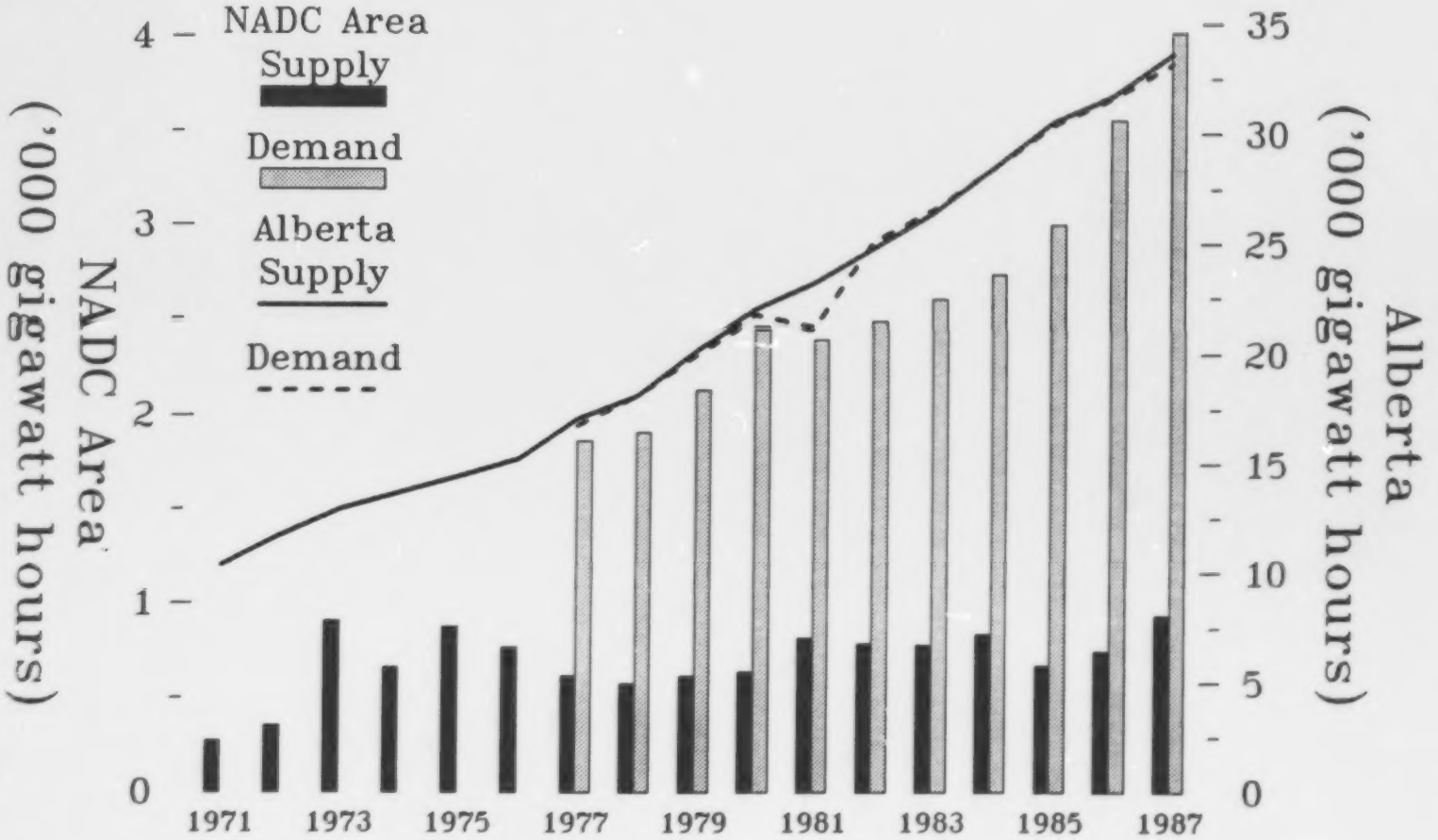


TABLE H1
Net Electric Energy Generation by Plant
(Gigawatt Hours)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
NADC AREA																	
H. R. Milner	0	51	503	268	425	414	387	331	377	336	573	543	548	618	385	483	666
Fort McMurray	22	27	31	47	83	76	19	12	11	0	0	0	0	0	0	0	0
Simonette	106	102	98	106	125	70	43	36	42	57	42	34	21	3	6	14	1
Sturgeon	21	21	52	86	76	30	2	1	3	27	8	6	2	1	2	6	0
Rainbow	102	131	197	127	138	146	132	160	146	182	157	164	167	169	229	191	216
Isolated Plants	21	23	26	29	31	31	35	36	37	38	40	44	48	52	53	58	57
TOTAL	272	355	907	663	878	767	618	576	616	640	820	791	786	843	675	752	940
ANNUAL CHANGE (%)		30.5	155.5	-26.9	32.4	-12.6	-19.4	-6.8	6.9	4.0	28.0	-3.5	-0.6	7.2	-19.9	11.4	25.0
ALBERTA	10 350	11 719	12 880	13 626	14 367	15 164	17 003	18 066	20 166	21 910	23 163	24 718	26 358	28 425	30 517	31 691	33 660
ANNUAL CHANGE (%)		13.2	9.9	5.8	5.4	5.5	12.1	6.3	11.6	8.6	5.7	6.7	6.6	7.8	7.4	3.8	6.2
NADC AREA AS % OF ALBERTA	2.6	3.0	7.0	4.9	6.1	5.1	3.6	3.2	3.1	2.9	3.5	3.2	3.0	3.0	2.2	2.4	2.8

SOURCES:
- Alberta Electric Industry Annual Statistics (ST-28), Energy Resources Conservation Board (1980-1987)
- Trends 1971-1979 (1971-1979)

NOTES:
- Data do not include electric power generated for on-site consumption (e.g., Syncrude, Suncor and Procter & Gamble Cellulose).
- Isolated plants in the NADC area: Fort Chipewyan, Fox Lake, Jean D'Or Prairie, Peerless Lake, Trout Lake, Janvier, Conklin & Chipewyan Lake. Also included in this category are three plants located outside the NADC area boundary: Jasper, Jasper (Astoria) and Microwaves.
- Alberta Power Ltd. operates all the above-listed plants except Conklin in the "Isolated" category.

TABLE H2
Off–site Electric Energy Demand by Supplier
(Gigawatt Hours)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NORTHERN REGION												
Alberta Power	1 634	1 678	1 877	2 195	2 142	2 215	2 329	2 453	2 686	3 198	3 578	3 986
Transalta	234	238	261	270	272	277	289	299	330	376	464	601
TOTAL	1 868	1 916	2 138	2 465	2 414	2 492	2 618	2 752	3 016	3 574	4 042	4 587
ANNUAL CHANGE (%)		2.6	11.6	15.3	-2.1	3.2	5.1	5.1	9.6	18.5	13.1	13.5
ALBERTA	16 707	18 078	19 969	21 680	21 113	25 025	26 525	28 419	30 381	31 622	33 209	36 103
ANNUAL CHANGE (%)		8.2	10.5	8.6	-2.6	18.5	6.0	7.1	6.9	4.1	5.0	8.7
NORTHERN REGION AS % OF ALBERTA	11.2	10.6	10.7	11.4	11.4	10.0	9.9	9.7	9.9	11.3	12.2	12.7

SOURCES:
- Alberta Power Ltd.
- TransAlta Utilities
- Electric Utilities Planning Commission (EUPC)

NOTE:
- Northern Region is defined as the Alberta Power North Division and Transalta Utilities Districts 80, 84, 85 and 86.

TABLE H3
Water Use
by River Basin
(Cubic Decametres)

	1971	1976	1981	1986
NORTHERN REGION				
Diversion				
Athabasca River	125 700	150 600	200 400	151 300
Beaver River	3 600	3 300	3 812	13 100
Peace River	26 200	65 000	67 500	62 300
TOTAL	155 500	218 900	271 712	226 700
AVERAGE ANNUAL CHANGE (%)		7.1	4.4	-3.6
Consumption				
Athabasca River	79 580	53 600	94 400	69 540
Beaver River	2 000	1 860	2 212	10 300
Peace River	18 560	33 520	29 140	26 000
TOTAL	100 140	88 980	125 752	105 840
AVERAGE ANNUAL CHANGE (%)		-2.3	7.2	-3.4
ALBERTA				
Diversion	3 569 000	4 255 000	4 268 000	4 719 000
AVERAGE ANNUAL CHANGE (%)		3.6	0.1	2.0
Consumption	1 555 700	1 989 600	2 147 000	2 534 600
AVERAGE ANNUAL CHANGE (%)		5.0	1.5	3.4
NORTHERN REGION AS % OF ALBERTA				
Diversion	**4.4**	**5.1**	**6.4**	**4.8**
Consumption	**6.4**	**4.5**	**5.9**	**4.2**

SOURCE:
- Alberta Environment, Water Resources Management Services Planning Division

NOTES:
- The Northern Region includes the Athabasca, Beaver and Peace River basins.
- The Peace River basin includes the Slave and Liard River basins.
- The NADC area includes parts of the North Saskatchewan River basin which are not included in this table. Significant water users in this area with volumes diverted in 1986 were:
  - enhanced oil recovery schemes: 100 cubic decametres
  - the communities of St. Paul and Elk Point: 1 100 cubic decametres
- Part of the Athabasca River basin is not included in the NADC area. Significant water users in this area with volumes of water diverted in 1986 were:
  - enhanced oil recovery schemes: 2 000 cubic decametres
  - the communities of Edson, Hinton, Barrhead, Westlock and Sangudo: 4 500 cubic decametres

TABLE H4
Water Use
by Sector
(Cubic Decametres)

	CONSUMPTION				DIVERSION			
	1971	1976	1981	1986	1971	1976	1981	1986
NORTHERN REGION								
Industrial	34 400	24 000	64 000	46 700	79 200	138 000	188 000	143 000
Irrigation	1 900	3 600	3 400	5 300	1 900	3 600	3 400	5 300
Municipal	2 640	3 780	5 140	5 840	13 200	18 900	25 700	29 200
Oil and Gas	47 000	42 000	34 812	29 700	47 000	42 000	34 812	29 700
Other Rural	13 900	15 500	16 100	16 300	13 900	15 500	16 100	16 300
Power Generation	300	100	2 300	2 000	300	900	3 700	3 200
TOTAL	100 140	88 980	125 752	105 840	155 500	218 900	271 712	226 700
AVERAGE ANNUAL CHANGE (%)		-2.3	7.2	-3.4		7.1	4.4	-3.6
ALBERTA								
Industrial	49 000	54 000	137 000	88 000	226 000	261 000	335 000	278 000
Irrigation	1 290 000	1 692 000	1 730 000	2 152 000	1 838 000	2 262 000	2 350 000	2 726 000
Municipal	43 200	53 400	77 000	80 600	216 000	267 000	385 000	403 000
Oil and Gas	69 000	69 000	58 000	51 000	69 000	69 000	58 000	51 000
Other Rural	103 000	115 000	117 000	117 000	103 000	115 000	117 000	117 000
Power Generation	1 500	6 200	28 000	46 000	1 117 000	1 281 000	1 023 000	1 144 000
TOTAL	1 555 700	1 989 600	2 147 000	2 534 600	3 569 000	4 255 000	4 268 000	4 719 000
AVERAGE ANNUAL CHANGE (%)		5.0	1.5	3.4		3.6	0.1	2.0
NORTHERN REGION AS % OF ALBERTA								
Industrial	70.2	44.4	46.7	53.1	35.0	52.9	56.1	51.4
Irrigation	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.2
Municipal	6.1	7.1	6.7	7.2	6.1	7.1	6.7	7.2
Oil and Gas	68.1	60.9	60.0	58.2	68.1	60.9	60.0	58.2
Other Rural	13.5	13.5	13.8	13.9	13.5	13.5	13.8	13.9
Power Generation	20.0	1.6	8.2	4.3	0.0	0.1	0.4	0.3
TOTAL	6.4	4.5	5.9	4.2	4.4	5.1	6.4	4.8

SOURCE:
- Alberta Environment, Water Resources Management Services Planning Division

NOTES:
- The Northern Region includes the Athabasca, Beaver and Peace River basins.
- The Peace River basin includes the Slave and Liard River basins.
- The NADC area includes parts of the North Saskatchewan River basin which are not included in this table.
  Significant water users in this area with volumes diverted in 1986 were:
  - enhanced oil recovery schemes: 100 cubic decametres
  - the communities of St. Paul and Elk Point: 1 100 cubic decametres
- Part of the Athabasca River basin is not included in the NADC area. Significant water users in this area with volumes of water diverted in 1986 were:
  - enhanced oil recovery schemes: 2 000 cubic decametres
  - the communities of Edson, Hinton, Barrhead, Westlock and Sangudo: 4 500 cubic decametres
- For Municipal users it was assumed that 80% of diversions were returned.
- For non-district Irrigation, Oil & Gas and Other Rural users, it was assumed that no amount of diversions were returned.

HOUSING

Introduction

Housing in the NADC area comprised 9 percent of the total provincial stock of private dwellings in 1986. Of the 74,905 dwellings in the NADC area in 1986, 65 percent are owned, and the remainder are rented or "on reserves." In the NADC area, average apartment vacancy rates over the past 13 years reached a peak in 1987. Housing starts are only available for the two cities, Fort McMurray and Grande Prairie, and are dramatically lower in 1988 than in the peak years of the late 1970s and early 1980s.

I1 Occupied Private Dwellings by Nature of Tenure

Highlights

- By 1986, there were almost 75,000 dwellings in the NADC area. 1,980 of those dwellings were on Indian reserves.
- 50 percent of "on reserve" housing in the province was in the NADC area.
- The largest growth in private dwellings in the NADC area occurred from 1976 to 1981 (35 percent).
- The growth rate in the NADC area mirrored that of the province .

I2 Average One-bedroom Apartment Rental Rates

Highlights

- Rental rates in the NADC area increased greatly from 1976 to 1981, but the rate increases slowed dramatically from 1981 to 1986.
- Some of the largest increases over the period 1976 to 1988 occurred in Athabasca (221 percent), High Prairie (206 percent), Grimshaw (188 percent), Slave Lake (185 percent) and Spirit River (183 percent).
- The highest average municipal rental rate in 1988 was $516 per month in High Level with the lowest rate of $268 in Sexsmith.

I3 Apartment Vacancy Rates

Highlights

- Some of the most dramatic increases in vacancy rates in the NADC area were found in:

Bonnyville	- 2 percent in 1976 - 35 percent in 1987
Grande Cache	- 0 percent in 1976 - 40 percent in 1986
High Level	- 0 percent in 1982 - 31 percent in 1987
St. Paul	- 0 percent in 1976 - 35 percent in 1987

- In 1988, the largest vacancy rates in the NADC area were found in the communities of Grande Cache (35 percent), Sexsmith (24 percent) and Beaverlodge, Elk Point, Fahler, Fort McMurray and McLennan (all approximately 22 percent), much higher than the 1988 average vacancy rate in Alberta of 10 percent.

I4 Annual Housing Starts

Highlights

- Single detached dwellings were the main type of housing built in Grande Prairie and Fort McMurray between 1971 and 1988.
- Total starts have decreased from the peak years of the late 1970s and early 1980s for both Grande Prairie and Fort McMurray to 143 and 38, respectively in 1988.
- Grande Prairie added over 1,400 new dwellings in 1979 while Fort McMurray added over 1,200 new dwellings in 1981.

TABLE II
Occupied Private Dwellings by Nature of Tenure

	1976	1981	1986
NADC AREA			
Total Occupied Private Dwellings	49 250	66 600	74 905
Owned	35 390	45 625	48 790
Rented	13 860	20 975	24 135
On Reserve	NA	NA	1 980
AVERAGE ANNUAL CHANGE (%)			
Total Occupied Private Dwellings		6.2	2.4
Owned		5.2	1.4
Rented		8.6	2.8
ALBERTA			
Total Occupied Private Dwellings	575 280	758 240	836 125
Owned	372 825	478 215	516 090
Rented	202 455	280 025	316 070
On Reserve	NA	NA	3 965
AVERAGE ANNUAL CHANGE (%)			
Total Occupied Private Dwellings		5.7	2.0
Owned		5.1	1.5
Rented		6.7	2.5
NADC AREA AS % OF ALBERTA			
Total Occupied Private Dwellings	8.6	8.8	9.0
Owned	9.5	9.5	9.5
Rented	6.8	7.5	7.6
On Reserve			49.9

SOURCE:
- Census of Canada

NOTES:
- NADC area includes totals for Census Divisions 12, 13 and 15 (1976, 1981), and Census Divisions 12, 13, 16, 17, 18 and 19 (1986), adjusted for the NADC area boundary.
- For historical and statutory reasons, shelter occupancy on reserves does not lend itself to the usual classification by standard tenure categories. Therefore, a special category for reserves has been created on 1986 census data to apply to all occupied private dwellings on reserves whether originally reported as owned or rented. This category is "On Reserve".

TABLE I2
Average One–bedroom Apartment Rental Rate for Selected Municipalities
(Unadjusted Dollars)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NADC AREA													
Athabasca	114	139	186	163	195	228	255	275	283	278	318	335	366
Beaverlodge	132	135	155	209	234	287	303	302	301	300	309	295	282
Bonnyville	179	192	242	270	289	291	269	280	310	374	413	376	381
Cold Lake	NA	NA	200	264	275	259	253	262	330	400	422	416	387
Elkpoint	NA	NA	NA	NA	NA	NA	NA	NA	NA	425	485	317	322
Fairview	NA	NA	207	251	288	312	370	389	354	370	381	381	381
Falher	NA	NA	178	198	248	282	314	339	350	358	352	357	360
Fort McMurray	NA	307	324	337	363	424	485	474	474	490	488	457	452
Fox Creek	NA	NA	256	291	302	366	409	368	366	361	372	372	370
Grand Centre	NA	NA	229	263	297	301	339	325	370	429	431	432	432
Grande Cache	219	291	306	206	210	370	451	432	387	343	323	317	306
Grande Prairie	191	226	238	273	359	392	374	351	349	358	388	393	386
Grimshaw	120	130	120	180	266	364	300	352	317	410	334	334	346
High Level	NA	NA	344	378	411	455	539	550	571	592	595	557	516
High Prairie	142	165	205	227	278	291	353	367	387	401	406	430	434
Lac La Biche	159	183	197	236	258	296	305	382	420	392	396	398	399
Manning	NA	NA	NA	NA	NA	NA	227	242	NA	NA	NA	NA	NA
McLennan	NA	NA	183	202	261	312	325	396	401	414	428	452	452
Peace River	155	188	248	237	277	311	354	396	394	398	430	397	418
Sexsmith	NA	NA	NA	NA	NA	410	342	262	265	245	286	307	268
Slave Lake	171	221	225	214	245	320	375	390	405	440	491	491	488
Spirit River	98	139	102	136	168	213	226	254	264	265	268	279	277
St. Paul	131	164	178	206	238	277	276	306	312	313	323	330	334
Swan Hills	NA	NA	NA	NA	NA	468	461	461	429	392	393	390	390
Valleyview	NA	NA	211	221	271	279	361	356	355	358	363	379	390
Whitecourt	163	184	232	272	315	330	335	306	298	303	310	322	336
AVERAGE	152	190	217	238	275	327	344	353	362	376	388	381	379
ANNUAL CHANGE (%)		25.0	14.2	9.7	15.5	18.9	5.2	2.6	2.5	3.9	3.2	-1.8	-0.5

SOURCE:
- Alberta Municipal Affairs, Market & Economic Analysis

NOTES:
- Averages are not weighted.
- Alberta data are not available.

TABLE I3
Apartment Vacancy Rates for Selected Municipalities
(%)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NADC AREA													
Athabasca	NA	1.5	17.7	13.2	8.4	11.8	11.8	5.0	9.5	9.0	5.7	10.9	11.3
Beaverlodge	NA	NA	NA	NA	NA	10.4	11.8	6.5	15.6	5.2	20.8	24.7	22.1
Bonnyville	2.3	3.8	4.3	7.0	12.2	26.4	31.1	12.7	1.6	0.3	18.5	35.1	9.8
Cold Lake	NA	NA	0.0	18.0	0.0	23.8	25.0	2.3	1.1	0.0	13.7	11.8	0.0
Elk Point	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23.3	48.6	22.0
Fairview	NA	NA	NA	4.5	1.3	0.0	5.0	2.6	4.6	4.5	11.1	24.4	13.0
Falher	NA	NA	5.3	0.0	6.5	3.2	12.9	9.7	8.1	0.0	17.9	19.6	22.2
Fort McMurray	NA	NA	3.3	1.9	0.2	2.2	12.2	12.6	3.8	6.9	27.4	27.5	21.6
Fox Creek	NA	NA	3.6	0.0	0.0	0.0	31.5	25.9	26.3	7.6	10.8	30.0	1.6
Grand Centre	NA	NA	0.0	1.1	11.5	25.1	9.2	3.1	0.0	2.4	7.8	8.6	5.0
Grande Cache	0.0	0.6	61.7	56.3	10.8	0.0	16.9	32.1	23.2	33.9	40.2	34.2	34.9
Grande Prairie	2.4	6.7	1.1	0.2	1.3	8.2	25.9	22.4	15.3	2.3	10.1	7.7	15.4
Grimshaw	4.2	4.2	4.2	4.5	5.0	4.8	2.2	4.8	15.2	6.4	13.0	17.4	13.0
High Level	NA	NA	12.7	0.0	0.0	0.0	0.0	1.9	1.3	2.5	21.3	30.6	20.8
High Prairie	0.0	1.5	0.0	2.9	15.5	3.9	7.3	4.6	6.2	6.2	8.8	5.3	6.6
Lac La Biche	0.0	0.0	0.0	1.9	10.9	0.0	0.0	0.0	1.7	12.7	5.8	13.2	12.7
Manning	NA	NA	NA	NA	NA	NA	9.1	9.1	NA	NA	NA	NA	NA
McLennan	NA	NA	0.0	4.8	11.1	14.8	0.0	0.0	0.0	3.7	11.1	3.7	22.2
Peace River	2.4	1.5	7.4	1.9	1.4	7.8	4.8	19.6	19.6	6.4	10.3	19.5	11.3
Sexsmith	NA	NA	NA	NA	NA	38.3	20.6	37.0	42.0	20.4	18.5	38.9	24.1
Slave Lake	4.7	4.7	5.9	1.7	3.4	0.6	1.6	3.4	0.7	0.3	5.3	14.8	5.2
Spirit River	3.2	4.3	2.2	4.8	2.1	4.2	25.0	13.3	10.6	10.9	15.2	3.8	10.2
St. Paul	0.0	3.8	4.3	7.0	12.2	26.4	31.1	12.7	1.6	0.3	18.5	35.1	9.8
Swan Hills	NA	NA	NA	NA	NA	15.4	28.1	50.0	31.4	0.0	17.0	22.6	9.1
Valleyview	NA	NA	11.4	12.1	3.8	3.4	21.6	24.8	11.4	2.9	23.6	13.3	3.7
Whitecourt	0.0	0.0	1.8	1.1	6.0	14.9	30.7	27.5	32.2	11.[illegible]	3.4	10.7	0.2
AVERAGE	1.7	2.7	7.3	6.9	5.9	10.2	15.0	13.7	11.8	6.5	15.2	20.5	13.1
ANNUAL CHANGE (%)		58.8	170.4	-5.5	-14.5	72.9	47.1	-8.7	-13.9	-44.9	133.8	34.9	-36.1
ALBERTA	2.0	5.0	9.0	9.0	5.0	5.0	9.0	12.0	12.0	7.0	9.0	11.0	10.0
ANNUAL CHANGE (%)		150.0	80.0	0.0	-44.4	0.0	80.0	33.3	0.0	-41.7	28.6	22.2	-9.1

SOURCE:
- Alberta Municipal Affairs

NOTE:
- NADC area averages are not weighted; Alberta averages are weighted.

TABLE 14
Annual Housing Starts by Dwelling Type

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NADC AREA																		
Grande Prairie																		
Single Detached	242	297	288	255	213	189	286	399	535	210	102	4	44	88	164	171	146	141
Semi-Detached	14	18	26	0	8	6	12	28	143	68	40	0	2	6	2	0	10	2
Row Housing	0	52	0	81	0	73	0	0	0	12	0	0	0	0	0	0	0	0
Apartments	51	325	172	4	0	65	50	322	758	505	172	0	65	0	0	0	0	0
TOTAL	307	692	486	340	221	333	348	749	1 436	795	314	4	111	94	166	171	156	143
ANNUAL CHANGE (%)		125.4	-29.8	-30.0	-35.0	50.7	4.5	115.2	91.7	-44.6	-60.5	-98.7	2675.0	-15.3	76.6	3.0	-8.8	-8.3
Fort McMurray																		
Single Detached	NA	NA	NA	NA	NA	NA	85	193	466	681	652	155	126	112	221	20	14	38
Semi-Detached	NA	NA	NA	NA	NA	NA	156	54	96	90	68	40	0	0	0	2	0	0
Row Housing	NA	NA	NA	NA	NA	NA	84	0	44	39	34	0	0	0	0	0	0	0
Apartments	NA	NA	NA	NA	NA	NA	43	65	0	0	468	211	0	52	44	12	0	0
TOTAL	NA	NA	NA	NA	NA	NA	368	312	606	810	1222	406	126	164	265	34	14	38
ANNUAL CHANGE (%)		NA	NA	NA	NA	NA	NA	-15.2	94.2	33.7	50.9	-66.8	-69.0	30.2	61.6	-87.2	-58.8	171.4
ALBERTA																		
Single Detached	10 258	12 182	13 839	13 511	14 989	17 765	14 298	19 757	20 066	16 780	17 972	9 637	11 596	6 549	7 691	7 146	9 495	9 671
Semi-Detached	1 007	1 170	997	1 037	2 015	1 955	2 573	4 362	3 349	2 618	1 907	927	422	107	78	223	292	677
Row Housing	3 051	2 027	1 090	1 305	2 904	8 626	7 168	o 504	4 263	4 230	4 853	3 614	1 262	237	66	514	537	554
Apartments	11 286	7 124	5 051	3 155	4 799	10 425	14 036	17 302	12 269	8 403	13 738	12 611	3 854	402	502	579	466	458
TOTAL	25 602	22 503	20 977	19 008	24 707	38 771	38 075	47 925	39 947	32 031	38 470	26 789	17 134	7 295	8 337	8 462	10 790	11 360
ANNUAL CHANGE (%)		-12.1	-6.8	-9.4	30.0	56.9	-1.8	25.9	-16.6	-19.8	20.1	-30.4	-36.0	-57.4	14.3	1.5	27.5	5.3
NADC AREA AS % OF ALBERTA																		
Grande Prairie	1.2	3.1	2.3	1.8	0.9	0.9	0.9	1.6	3.6	2.5	0.8	0.0	0.6	1.3	2.0	2.0	1.4	1.3
Fort McMurray	NA	NA	NA	NA	NA	NA	1.0	0.7	1.5	2.5	3.2	1.5	0.7	2.2	3.2	0.4	0.1	0.3

SOURCE:
- CMHC, Edmonton Office, Market Analysis Unit

NOTES:
- Single Detached: Contains only one dwelling unit which is completely separated on all sides from any other structure.
- Semi-Detached: Contains two dwellings separated by a common wall extending from ground to roof or by a garage.
- Row Housing: Ground-oriented structure containing three or more dwelling units.
- Apartment: A dwelling unit situated above or below one or more other units.

TRANSPORTATION

Introduction

This section deals with the infrastructure, air and highway traffic volumes and the movement of agricultural goods in the NADC area. The department of transportation measures average annual daily traffic volumes (AADTs) at selected roadway locations to determine traffic patterns. In general, NADC area traffic volumes have increased steadily since 1973. Primary highway construction has experienced fluctuations between 1983 and 1987, with asphalt and seal coating comprising the most lane-km of construction performed. Secondary roads received a substantial share of the province's total grading and base course preparation while regravelling and dust abatement activities dropped to zero by 1987.

Passenger vehicle registrations in the NADC area have decreased since the peak period of the early 1980s. Grain deliveries, on the other hand, rose 53 percent from 1979 to 1989.

Both aircraft movements (landings and takeoffs of itinerant and local flights) and domestic air passenger traffic volumes have fallen since the early 1980s. Grande Prairie was the second-busiest airport (after Fort McMurray) in terms of aircraft movements in 1988 and was the busiest in terms of passenger traffic in the NADC area.

J1 Selected Highway Traffic Volumes

Of the selected highway traffic volume locations in 1988, the most frequently travelled route in the NADC area was Hwy #2 west of Grande Prairie, which saw an average daily traffic count in 1988 of 5,100 vehicles. The second-most travelled route was Hwy #63 north of Fort McMurray with a daily count of 3,580 vehicles.

J2 Highway Construction

Highlights

- Primary highway grading declined 44 percent from 1983 to 1987, base course construction declined 26 percent, while asphalt and seal coat construction rose 16 percent and 139 percent, respectively.
- Of all primary highway construction undertaken in the province in 1987, one-quarter of all grading, more than half the seal coating, and one-sixth of the base course construction was performed in the NADC area.
- In 1987, 89 km of secondary highway in the NADC area was graded, or 19 percent of the provincial total. Base course was laid on 90 km (25 percent of the provincial total) with 49 km of asphalt and 15 km of seal coat laid (15 percent and 6 percent of the provincial totals, respectively).
- Of all secondary highway construction activity in the NADC area between 1983 and 1987, grading declined by 33 percent, seal coating by 80 percent and regravelling and dust abatement activities dropped by 100 percent.

J3 Passenger Vehicle Registrations

Highlights

- A total of 49,964 vehicles were registered in 1987, an increase of 3 percent from the previous year but a decline of 16 percent from a peak in 1983.
- Fort McMurray has the largest number of vehicles registered in the area, followed closely by Grande Prairie, with the smallest number in Fairview.
- The NADC area portion of provincial passenger vehicles registered increased from 3.1 percent in 1971 to a peak of 4.7 percent in 1980 and dropped off to 4.3 percent by 1987.

J4 Grain Delivery and Elevator System Capacity

Highlights

- In 1989, farmers delivered 1.6 million tonnes of wheat, oats, barley, rye, flaxseed and rapeseed to 63 elevators in the NADC area.
- While grain deliveries in the NADC area have increased by almost 53 percent since 1979, the number of elevators and total elevator capacity has declined, mirroring provincial trends.

J5 Aircraft Movements at Selected Airports

Highlights

- The busiest airports in the NADC area in 1988 were in Fort McMurray and Grande Prairie with 41,026 and 36,714 aircraft movements, respectively.
- Steady decreases at most airports have been evident for many years. Total movements have decreased from a peak of 210,557 in 1981 to 126,714 in 1988. Total movements have declined by a similar proportion for the province as a whole over the same period.

J6 Domestic Air Passenger Traffic at Selected Airports

Highlights

- Domestic air passenger traffic at selected northern airports declined dramatically from 1980 to 1987. The largest declines occurred at the High Level and Peace River airports, which both fell over 96 percent.
- 1988 saw a significant jump in passenger traffic (180 percent from 1987) to over 200,000 passengers.

REGION 4

1	28	4.0 KM W ASHMONT
2	28	2.9 KM E ST. BRIDES
3	28	2.4 KM E BONNEYVILLE
4	63	5.2 KM N FT. McMURRAY

REGION 5

5	63	1.6 KM E GRASSLAND
6	63	8.9 KM N 55 & 63

REGION 6

7	2	7.2 KM E 2 & 88
8	2	1.8 KM W HIGH PRAIRIE
9	2	1.6 KM S 2 & 49
10	2	8 KM N NAMPA
11	2	9 KM N RYCROFT
12	2	12 KM W GRANDE PRAIRIE
13	2	2.4 KM E B.C. BORDER
14	34	9.0 KM E 2 & 34
15	34	1.0 KM W VALLEYVIEW
16	35	4.0 KM N 2 & 35
17	35	14 KM N HIGH LEVEL
18	43	10 KM S VALLEYVIEW
19	49	2.0 KM E 2 & 49

Figure J1

Selected Traffic Count Locations in the NADC Area

TABLE J1
Selected Traffic Volumes
(Annual Average Daily Traffic)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NADC AREA																
Region 4 (North-East)																
Hwy 28 4.0 km W Ashmont	1 160	1 265	1 370	1 520	1 700	1 750	1 900	2 040	2 000	1 860	1 890	2 010	2 170	2 110	2 090	2 250
Hwy 28 2.9 km E St. Brides	NA	NA	NA	NA	1 780	1 600	1 775	1 950	2 125	2 300	2 230	2 280	2 330	2 510	2 690	2 690
Hwy 28 2.4 km E Bonnyville	NA	NA	NA	NA	1 540	1 860	1 987	2 113	2 240	1 830	2 190	2 620	3 300	3 020	3 430	3 430
Hwy 63 5.2 km N Fort McMurray	NA	NA	2 080	2 693	3 307	3 920	4 560	3 750	3 960	3 490	3 530	3 820	3 950	2 870	3 430	3 580
Region 5 (North-Central)																
Hwy 63 1.6 km E Grassland	NA	NA	NA	NA	NA	1 440	1 550	1 630	1 670	1 430	1 430	1 490	1 590	1 580	1 650	1 700
Hwy 63 8.9 km N 55 & 63	NA	NA	630	930	1 180	910	1 010	1 110	1 080	990	1 010	1 080	1 160	1 100	1 170	1 230
Region 6 (North-West)																
Hwy 2 7.2 km E 2 & 67	NA	NA	NA	NA	1 150	1 180	1 305	1 430	1 555	1 680	2 070	2 280	3 070	2 740	2 780	2 510
Hwy 2 1.8 km W High Prairie	NA	NA	NA	NA	1 610	1 700	1 900	1 970	2 330	2 100	2 210	2 485	2 760	2 760	2 990	3 170
Hwy 2 1.6 km S 2 & 49	NA	NA	NA	NA	1 350	1 410	1 323	1 235	1 148	1 060	1 130	1 100	1 140	1 165	1 190	1 216
Hwy 2 8 km N Nampa	1 010	1 110	1 240	1 310	1 360	1 500	1 600	1 640	1 750	1 680	1 730	1 860	1 890	1 870	1 800	1 920
Hwy 2 9 km N Rycroft	710	755	815	860	930	1 100	1 140	1 280	1 330	1 200	1 320	1 330	1 400	1 430	1 430	1 540
Hwy 2 12 km W Grande Prairie	2 005	2 200	2 450	2 650	3 020	3 610	4 610	5 100	4 850	4 230	4 310	4 730	5 050	4 970	4 980	5 100
Hwy 2 2.4 km E B.C. border	925	937	948	960	1 230	1 480	1 445	1 410	1 280	1 110	1 050	1 080	1 170	1 170	1 250	1 320
Hwy 34 9.0 km E 2 & 34	1 775	1 760	1 755	1 930	2 050	2 270	2 700	2 930	2 820	2 650	2 660	2 720	3 000	2 970	3 090	3 140
Hwy 34 1.0 km W Valleyview	0	0	0	0	2 260	2 060	2 940	3 035	3 130	2 630	2 530	2 650	2 910	2 875	2 840	3 160
Hwy 35 4.0 km N 2 & 35	735	735	790	890	960	1 110	1 200	1 240	1 350	1 350	1 400	1 470	1 550	1 560	1 530	1 610
Hwy 35 14 km N High Level	0	0	0	0	0	310	300	350	390	530	560	560	520	460	430	500
Hwy 43 10 km S Valleyview	1 680	1 730	1 740	1 850	1 950	2 240	2 610	2 770	2 640	2 350	2 440	2 550	2 880	2 850	2 810	3 010
Hwy 49 2.0 km E 2 & 49	0	0	0	0	790	802	814	826	838	850	900	850	960	920	920	920

TABLE J1
Selected Traffic Volumes
(Annual Average Daily Traffic)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
ANNUAL CHANGE (%)																
Region 4 (North-East)																
Hwy 28 4.0 km W Ashmont		9.1	8.3	10.9	11.8	2.9	8.6	7.4	-2.0	-7.0	1.6	6.3	8.0	-2.8	-0.9	7.7
Hwy 28 2.9 km E St. Brides		NA	NA	NA	NA	-10.1	10.9	9.9	9.0	8.2	-3.0	2.2	2.2	7.7	7.2	0.0
Hwy 28 2.4 km E Bonnyville		NA	NA	NA	NA	20.8	6.8	6.4	6.0	-18.3	19.7	19.6	26.0	-8.5	13.6	0.0
Hwy 28 5.2 km N Fort McMurray		NA	NA	29.5	22.8	18.5	16.3	-17.8	5.6	-11.9	1.1	8.2	3.4	-27.3	19.5	4.4
Region 5 (North-Central)																
Hwy 63 1.6 km E Grassland		NA	NA	NA	NA	NA	7.6	5.2	2.5	-14.4	0.0	4.2	6.7	-0.6	4.4	3.0
Hwy 63 8.9 km N 55 & 63		NA	NA	36.8	26.9	-22.9	11.0	9.9	-2.7	-8.3	2.0	6.9	7.4	-5.2	6.4	5.1
Region 6 (North-West)																
Hwy 2 7.2 km E 2 & 67		NA	NA	NA	NA	2.6	10.6	9.6	8.7	8.0	23.2	10.1	34.6	-10.7	1.5	-9.7
Hwy 2 1.8 km W High Prairie		NA	NA	NA	NA	5.6	11.8	3.7	18.3	-9.9	5.2	12.4	11.1	0.0	8.3	6.0
Hwy 2 1.6 km S 2 & 49		NA	NA	NA	NA	4.4	-6.2	-6.6	-7.1	-7.6	6.6	-2.7	3.6	2.2	2.1	2.1
Hwy 2 8 km N Nampa		9.9	11.7	5.6	3.8	10.3	6.7	2.5	6.7	-4.0	3.0	7.5	1.6	-1.1	-3.7	6.7
Hwy 2 9 km N Rycroft		6.3	7.9	5.5	8.1	18.3	3.6	12.3	3.9	-9.8	10.0	0.8	5.3	2.1	0.0	7.7
Hwy 2 12 km W Grande Prairie		9.7	11.4	8.2	14.0	19.5	27.7	10.6	-4.9	-12.8	1.9	9.7	6.8	-1.6	0.2	2.4
Hwy 2 2.4 km E B.C. border		1.3	1.2	1.2	28.1	20.3	-2.4	-2.4	-9.2	-13.3	-5.4	2.9	8.3	0.0	6.8	5.6
Hwy 34 9.0 km E 2 & 34		-0.8	-0.3	10.0	6.2	10.7	18.9	8.5	-3.8	-6.0	0.4	2.3	10.3	-1.0	4.0	1.6
Hwy 34 1.0 km W Valleyview		0.0	0.0	0.0	•	-8.8	42.7	3.2	3.1	-16.0	-3.8	4.7	9.8	-1.2	-1.2	11.3
Hwy 35 4.0 km N 2 & 35		0.0	7.5	12.7	7.9	15.6	8.1	3.3	8.9	0.0	3.7	5.0	5.4	0.6	-1.9	5.2
Hwy 35 14 km N High Level		0.0	0.0	0.0	0.0	•	-3.2	16.7	11.4	35.9	5.7	0.0	-7.1	-11.5	-6.5	16.3
Hwy 43 10 km S Valleyview		3.0	0.6	6.3	5.4	14.9	16.5	6.1	-4.7	-11.0	3.8	4.5	12.9	-1.0	-1.4	7.1
Hwy 49 2.0 km E 2 & 49		0.0	0.0	0.0	•	1.5	1.5	1.5	1.5	1.4	5.9	-5.6	12.9	-4.2	0.0	0.0

SOURCE:
- Alberta Transportation, Corporate Planning Branch

NOTES:
- Average Annual Daily Traffic (AADT) is the average daily traffic expressed as vehicles per day for the period January 1 to December 31 (365 days).
- Missing data for some years have been estimated by applying the average change between adjacent reported years.
- Certain traffic count locations from the old Trends document have been omitted. The data previous to 1980 have been adjusted to reflect this fact.
- * denotes an annual change from zero to a number greater than zero (i.e., undefined).

TABLE J2
Highway Construction by Type
(Lane Km)

	PRIMARY					SECONDARY				
	1983	1984	1985	1986	1987	1983	1984	1985	1986	1987
NADC AREA										
Grading	127	65	64	138	71	132	83	78	76	89
Gravel	0	2	0	0	0	15	8	0	16	0
Base Course	90	77	76	123	67	93	74	69	95	90
Asphalt	130	72	42	109	151	35	36	101	44	49
Seal Coat	102	0	193	327	244	76	0	0	16	15
Regravel	0	0	0	0	0	108	117	43	83	0
Dust Abatement	10	0	0	0	0	146	185	45	0	0
ANNUAL CHANGE (%)										
Grading		-48.8	-1.5	115.6	-48.6		-37.1	-6.0	-2.6	17.1
Gravel		*	-100.0	NA	NA		-46.7	-100.0	*	NA
Base Course		-14.4	-1.3	61.8	-45.5		-20.4	-6.8	37.7	-5.3
Asphalt		-44.6	-41.7	159.5	38.5		2.9	180.6	-56.4	11.4
Seal Coat		NA	*	69.4	-25.4		-100.0	NA	*	-6.3
Regravel		NA	NA	NA	NA		8.3	-63.2	93.0	-100.0
Dust Abatement		-100.0	NA	NA	NA		26.7	-75.7	-100.0	NA
ALBERTA										
Grading	446	284	342	274	286	551	378	340	371	473
Gravel	1	2	27	1	0	33	8	5	16	0
Base Course	459	355	575	438	405	415	332	372	430	359
Asphalt	558	311	527	359	1084	154	187	301	280	318
Seal Coat	462	460	593	685	462	269	270	180	279	262
Regravel	40	20	0	0	66	145	346	110	186	126
Dust Abatement	125	20	0	8	0	772	550	405	74	8
ANNUAL CHANGE (%)										
Grading		-36.3	20.4	-19.9	4.4		-31.4	-10.1	9.1	27.5
Gravel		100.0	1250.0	-96.3	-100.0		-75.8	-37.5	220.0	-100.0
Base Course		-22.7	62.0	-23.8	-7.5		-20.0	12.0	15.6	-16.5
Asphalt		-44.3	69.5	-31.9	201.9		21.4	61.0	-7.0	13.6
Seal Coat		-0.4	28.9	15.5	-32.6		0.4	-33.3	55.0	-6.1
Regravel		-50.0	-100.0	NA	NA		138.6	-68.2	69.1	-32.3
Dust Abatement		-84.0	-100.0	*	-100.0		-28.8	-26.4	-81.7	-89.2
NADC AREA AS % OF ALBERTA										
Grading	**28.5**	**22.9**	**18.7**	**50.4**	**24.8**	**24.0**	**22.0**	**22.9**	**20.5**	**18.8**
Gravel	**0.0**	**100.0**	**0.0**	**0.0**	**0.0**	**45.5**	**100.0**	**0.0**	**100.0**	**0.0**
Base Course	**19.6**	**21.7**	**13.2**	**28.1**	**16.5**	**22.4**	**22.3**	**18.5**	**22.1**	**25.1**
Asphalt	**23.3**	**23.2**	**8.0**	**30.4**	**13.9**	**22.7**	**19.3**	**33.6**	**15.7**	**15.4**
Seal Coat	**22.1**	**0.0**	**32.5**	**47.7**	**32.8**	**28.3**	**0.0**	**0.0**	**5.7**	**5.7**
Regravel	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**74.5**	**33.8**	**39.1**	**44.6**	**0.0**
Dust Abatement	**8.0**	**0.0**	**0.0**	**0.0**	**0.0**	**18.9**	**33.6**	**11.1**	**0.0**	**0.0**

SOURCE:
- Alberta Transportation, Construction Programming Branch

NOTES:
- NADC area data include all primary and secondary highways within the NADC boundary.
- * denotes an annual change from zero to a number greater than zero (i.e., undefined).

TABLE J3
Passenger Vehicle Registrations by Regional Office

	1971	1972	1973	1974	1975	1976	1978	1979	1980	1981	1983	1986	1987
NADC AREA													
Athabasca	998	1 020	1 050	1 119	1 152	1 263	1 487	1 634	1 823	1 831	1 987	1 976	1 993
Bonnyville	995	1 088	1 171	1 268	1 389	1 496	1 871	2 156	2 713	2 821	3 096	2 974	3 067
Fairview	871	941	968	1 085	1 071	1 096	1 261	1 370	1 573	1 635	1 749	1 638	1 590
Grand Centre	674	743	823	922	967	1 049	1 368	1 561	2 079	2 072	2 123	1 854	1 878
Fort McMurray	1 921	2 156	2 618	3 836	5 201	7 960	10 661	12 108	15 197	16 453	17 683	12 784	12 406
Grande Prairie	4 852	5 631	6 290	6 941	7 041	7 389	8 906	10 671	13 992	14 138	14 229	11 770	11 683
High Prairie	1 009	1 010	1 079	1 163	1 113	1 113	1 319	1 404	1 587	1 663	1 833	1 757	1 754
Lac La Biche	752	740	782	889	956	983	1 249	1 288	1 404	1 602	1 814	1 709	1 753
Peace River	1 859	1 913	2 002	2 192	2 239	2 324	2 744	3 161	3 701	3 910	4 187	3 249	3 240
Slave Lake	639	755	942	1 142	1 116	1 142	1 343	1 495	1 819	1 935	2 210	1 912	1 975
St. Paul	1 499	1 587	1 688	1 899	2 014	2 361	2 852	3 174	3 572	3 560	3 771	3 086	3 014
Valleyview	808	866	897	993	960	978	1 210	1 262	1 390	1 447	1 548	1 365	3 022
Whitecourt	1 127	1 229	1 294	1 468	1 475	1 708	2 003	2 367	3 124	3 239	3 306	2 451	2 589
TOTAL	18 004	19 679	21 604	24 917	26 694	30 862	38 274	43 651	53 974	56 306	59 536	48 525	49 964
ANNUAL CHANGE (%)		9.3	9.8	15.3	7.1	15.6	11.4	14.0	23.6	4.3	2.8	-6.6	3.0
ALBERTA	577 913	588 399	627 931	687 345	715 713	789 385	960 284	1 040 277	1 141 901	1 216 340	1 290 176	1 295 635	1 151 276
ANNUAL CHANGE (%)		1.8	6.7	9.5	4.1	10.3	10.3	8.3	9.8	6.5	3.0	0.1	-11.1
NADC AREA AS % OF ALBERTA	3.1	3.3	3.4	3.6	3.7	3.9	4.0	4.2	4.7	4.6	4.6	3.7	4.3

SOURCE:
- Statistics Canada, Road Motor Vehicles (Catalogue #53-219)

NOTES:
- Data for 1977, 1982, 1984 & 1985 were not published.
- The annual change for the years 1978, 1983 and 1986 represents the average annual change for 1976 to 1978, 1981 to 1983, and 1983 to 1986, respectively.

TABLE J4
Grain Delivery and Elevator System Capacity
(Thousands of Tonnes)

	1979	1981	1986	1988	1989
NADC					
Number of Elevators	108	96	67	61	63
Capacity of Elevators	355	324	311	284	302
Annual Grain Delivery	1 066	1 192	1 102	1 253	1 632
ANNUAL CHANGE (%)					
Number of Elevators		-5.7	-6.9	-4.6	3.3
Capacity of Elevators		-4.4	-0.8	-4.4	6.3
Annual Grain Delivery		5.7	-1.6	6.6	30.2
ALBERTA					
Number of Elevators	1 174	1 040	560	523	478
Capacity of Elevators	3 108	2 903	2 706	2 600	2 525
Annual Grain Delivery	6 309	9 293	7 792	8 941	9 370
ANNUAL CHANGE (%)					
Number of Elevators		-5.9	-11.6	-3.4	-8.6
Capacity of Elevators		-3.4	-1.4	-2.0	-2.9
Annual Grain Delivery		21.4	-3.5	7.1	4.8
NADC AREA AS % OF ALBERTA					
Number of Elevators	9.2	9.2	12.0	11.7	13.2
Capacity of Elevators	11.4	11.2	11.5	10.9	12.0
Annual Grain Delivery	16.9	12.8	14.1	14.0	17.4

SOURCE:
- Canadian Grain Commission, Economics and Statistics Division

NOTE:
- Totals are generated from the licensed primary elevators within the NADC area.

TABLE J5
Aircraft Movements at Selected Airports

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NADC AREA																		
Fort Chipewyan	NA	NA	3 105	5 454	5 514	6 213	5 639	5 982	8 910	5 637	5 524	5 607	NA	NA	NA	NA	4 209	5 258
Fort McMurray	9 484	10 544	14 396	28 202	21 407	46 026	52 441	47 835	55 395	46 895	62 843	60 753	51 865	58 647	58 903	58 306	52 893	41 026
Grande Prairie	38 496	39 471	35 075	37 701	32 800	37 514	45 540	57 122	68 018	76 574	71 820	46 793	41 162	40 463	36 912	37 885	42 846	36 714
High Level	9 399	8 562	8 204	7 336	7 287	8 474	9 878	15 674	11 839	17 087	19 103	20 344	17 405	17 956	16 018	17 617	13 462	13 491
Lac La Biche	2 356	1 847	1 841	3 093	3 550	810	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Peace River	16 553	16 984	18 059	21 209	23 496	25 436	29 452	30 264	26 400	23 871	28 262	26 612	30 627	27 276	23 463	20 584	16 453	16 728
Rainbow Lake	3 444	2 357	2 184	1 701	1 192	1 338	803	590	862	3 251	2 385	2 515	2 649	2 705	2 602	2 088	1 732	1 524
Whitecourt	3 509	4 177	3 909	7 453	15 166	17 453	10 872	16 365	18 230	22 993	20 620	19 270	14 220	8 557	9 600	9 670	9 029	11 973
TOTAL	83 241	83 942	86 773	112 149	110 412	143 264	154 625	173 832	189 654	196 308	210 557	181 894	157 928	155 604	147 498	146 150	140 624	126 714
ANNUAL CHANGE (%)		0.8	3.4	29.2	-1.5	29.8	7.9	12.4	9.1	3.5	7.3	-13.6	-13.2	-1.5	-5.2	-0.9	-3.8	-9.9
ALBERTA	582 996	582 588	608 959	688 793	NA	NA	NA	741 150	602 844	820 503	824 630	670 830	684 151	646 886	695 385	650 557	648 490	574 344
ANNUAL CHANGE (%)		-0.1	4.5	13.1	NA	NA	NA	NA	-18.7	36.1	50.3	-18.7	2.0	-5.4	7.5	-6.4	-6.7	-11.4
NADC AREA AS % OF ALBERTA	14.3	14.4	14.2	16.3	NA	NA	NA	23.5	31.5	23.9	25.5	27.1	23.1	24.1	21.2	22.5	21.7	22.1

SOURCE:
- Transport Canada, Aviation Statistics Centre (Aircraft Movements)

NOTE:
- Aircraft movements refer to landings and takeoffs of itinerant and local flights.

TABLE J6
Domestic Air Passenger Traffic at Selected Airports
(Thousands of Passenger Movements)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NADC AREA																		
Fort Chipewyan	5.2	5.5	4.3	4.3	5.7	6.1	5.8	5.5	6.1	6.3	6.3	6.8	6.1	6.7	0.8	NA	NA	6.2
Fort McMurray	12.3	14.0	27.4	63.8	91.2	110.3	133.8	116.6	124.5	109.2	115.1	98.0	86.6	85.8	73.6	56.7	58.9	77.8
Grande Prairie	24.0	33.5	35.0	54.2	55.2	46.8	49.2	62.1	103.7	134.5	82.3	44.4	29.4	25.2	28.4	23.1	17.0	86.4
High Level	0.0	0.0	6.2	7.1	7.5	12.1	13.3	13.9	16.7	16.9	16.3	19.3	18.2	16.4	3.2	0.5	0.6	14.7
Peace River	7.7	8.9	10.9	12.2	12.9	14.8	16.9	21.8	26.2	31.9	33.7	23.8	18.2	14.4	4.0	1.7	1.1	25.9
Rainbow Lake	7.1	8.6	5.2	1.7	0.6	NA	0.1	0.1	NA	NA	NA	NA	NA	0.2	0.3	0.2	0.3	7.0
TOTAL	56.3	70.5	89.0	143.3	173.1	190.1	219.1	220.0	277.2	298.8	253.7	192.3	158.5	148.7	110.3	82.2	77.9	218.0
ANNUAL CHANGE (%)		25.2	26.2	61.0	20.8	9.8	15.3	0.4	26.0	7.8	-15.1	-24.2	-17.6	-6.2	-25.8	-25.5	-5.2	179.8
ALBERTA	1 642.3	1 912.6	2 384.0	2 813.0	3 085.0	3 202.0	3 325.0	3 812.0	4 809.0	5 184.0	5 080.0	4 446.0	3 917.0	3 903.0	3 721.0	3 646.0	3 552.0	4 279.8
ANNUAL CHANGE (%)		16.5	24.6	18.0	9.7	3.8	3.8	14.6	26.2	7.8	-2.0	-12.5	-11.9	-0.4	-4.7	-2.0	-2.6	20.5
NADC AREA AS % OF ALBERTA	3.4	3.7	3.7	5.1	5.6	5.9	6.6	5.8	5.8	5.8	5.0	4.3	4.0	3.8	3.0	2.3	2.2	5.1

SOURCE:
- Statistics Canada, Air Passenger Origin & Destination Domestic Report (Cat #51-204)

NOTE:
- Domestic air passenger traffic is defined as arrivals and departures within Canada.

COMMUNICATIONS

Introduction

The NADC area is served by three principal forms of communication: radio, television and newspapers. AM radio stations both originate in the NADC area and are rebroadcast to the area. FM stations are all rebroadcast to the north except for one that began operation in 1985. Television is enjoyed totally through rebroadcasts into the north.

In the NADC area, only Fort McMurray and Grande Prairie provide daily newspapers, with a combined circulation of almost 16,000 in 1988.

K1 Radio and Television Stations

Highlights

- Over 15 percent of the all AM radio stations in the province originated from the NADC area from 1985 to 1988.
- In 1988, 50 percent of the province's AM rebroadcasts or relays were directed into the NADC area.
- 34 television stations rebroadcast into the NADC area in 1988, accounting for 37 percent of all Alberta rebroadcasting.
- From 1987 to 1988, over half the FM stations that were being rebroadcast to the north were discontinued (from 17 to 8).

K2 Newspaper Circulation by Municipality

In 1988, total circulation of weekly newspapers was 82,227 in the NADC area, while the circulation of daily newspapers in the municipalities of Fort McMurray and Grande Prairie was 15,973 . Grande Prairie had the largest circulation of weeklies in 1988, followed by Bonnyville and St. Paul. Approximately 10 percent of the total provincial newspaper circulation was in the NADC area in 1988.

Figure K1
Newspaper Circulation

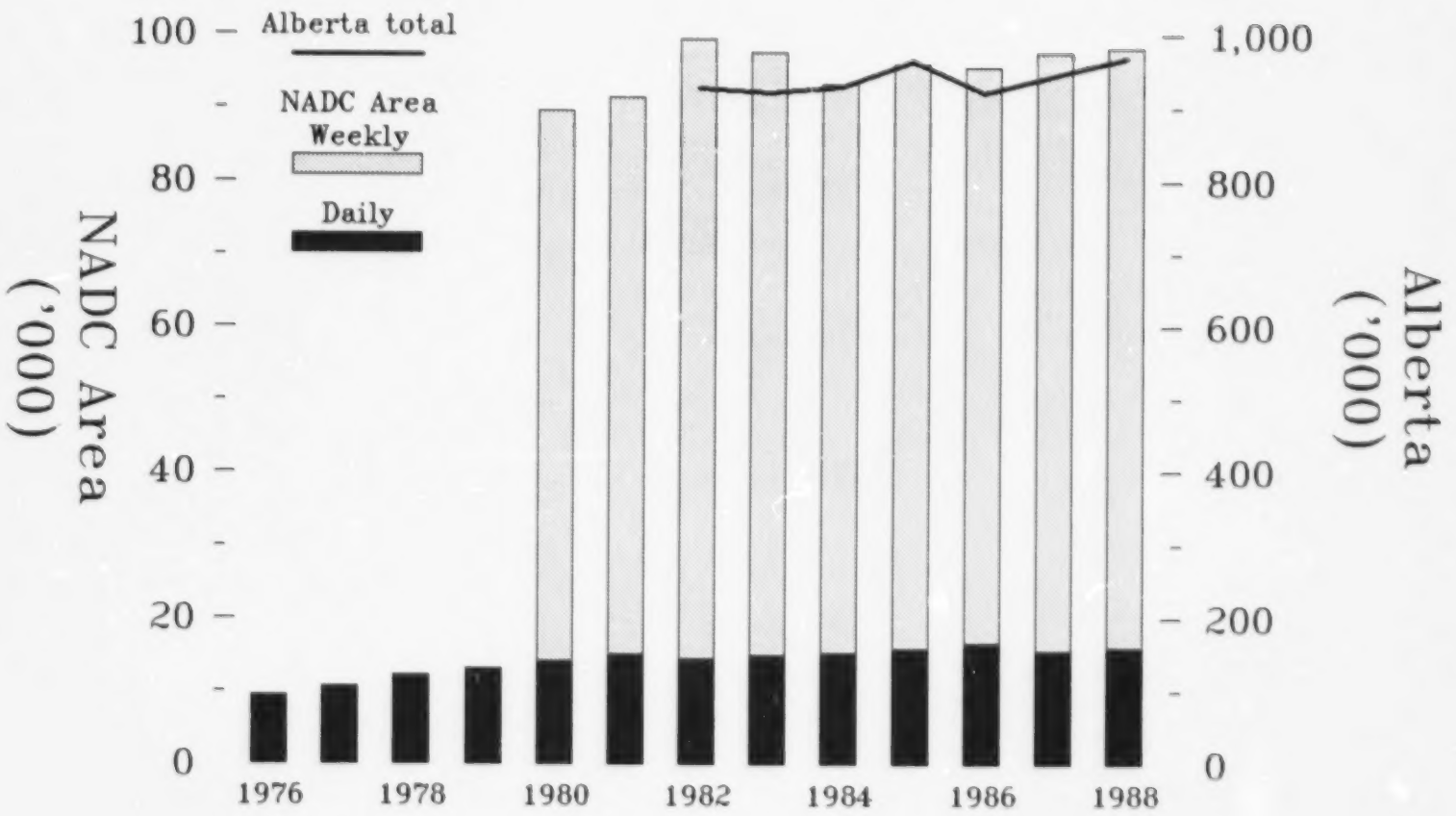


TABLE K1
Radio and Television Stations by Type

	1983	1984	1985	1986	1987	1988
NADC AREA						
AM Radio						
Originating	5	5	6	6	6	6
Rebroadcast/Relay	8	11	7	9	9	9
TOTAL	13	16	13	15	15	15
FM Radio						
Originating	0	0	1	1	1	1
Rebroadcast/Relay	16	16	16	17	17	8
TOTAL	16	16	17	18	18	9
Television						
Originating	0	0	0	0	0	0
Rebroadcast/Relay	33	36	36	36	36	34
TOTAL	33	36	36	36	36	34
ALBERTA						
AM Radio						
Originating	37	38	39	39	39	39
Rebroadcast/Relay	27	23	21	23	23	18
TOTAL	64	61	60	62	62	57
FM Radio						
Originating	15	20	21	21	21	22
Rebroadcast/Relay	31	32	34	35	35	36
TOTAL	46	52	55	56	56	58
Television						
Originating	8	9	9	9	9	9
Rebroadcast/Relay	82	99	99	98	98	91
TOTAL	90	108	108	107	107	100
NADC AREA AS % OF ALBERTA						
AM Radio						
Originating	13.5	13.2	15.4	15.4	15.4	15.4
Rebroadcast/Relay	29.6	47.8	33.3	39.1	39.1	50.0
TOTAL	20.3	26.2	21.7	24.2	24.2	26.3
FM Radio						
Originating	0.0	0.0	4.8	4.8	4.8	4.5
Rebroadcast/Relay	51.6	50.0	47.1	48.6	48.6	22.2
TOTAL	34.8	30.8	30.9	32.1	32.1	15.5
Television						
Originating	0.0	0.0	0.0	0.0	0.0	0.0
Rebroadcast/Relay	40.2	36.4	36.4	36.7	36.7	37.4
TOTAL	36.7	33.3	33.3	33.6	33.6	34.0

SOURCE:
- Canadian Almanac

TABLE K2
Newspaper Circulation by Municipality

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NADC AREA													
Daily													
Fort McMurray	3 005	4 129	5 401	5 776	5 895	6 379	6 078	6 573	6 888	7 398	7 591	6 461	6 945
Grande Prairie	6 327	6 454	6 758	7 269	8 202	8 628	8 312	8 387	8 379	8 509	9 080	9 099	9 028
TOTAL	9 332	10 583	12 159	13 045	14 097	15 007	14 390	14 960	15 267	15 907	16 671	15 560	15 973
Weekly													
Athabasca	3 513	3 650	4 400	4 400	5 000	5 500	5 500	5 181	3 300	4 925	5 058	5 049	5 619
Beaverlodge	NA	NA	1 825	1 825	1 862	1 929	2 064	1 988	2 002	1 958	1 965	1 988	1 934
Bonnyville	5 197	5 566	6 033	6 369	7 099	7 294	7 298	7 298	7 751	7 751	7 600	7 450	7 299
Cold Lake	NA	NA	3 100	3 100	3 100	3 100	3 100	3 035	3 035	3 035	3 054	2 998	2 934
Elk Point	NA	NA	NA	NA	NA	2 000	2 000	2092	2183	2 275	2 484	2 300	2 350
Fairview	3 663	3 847	3 848	4 400	4 827	4 782	4 117	3 972	4 168	4 168	3 699	3 710	3 636
Falher	NA	NA	NA	1 100	1 038	1 030	1 290	1 242	950	950	1 273	1 298	1 376
Fort McMurray	NA	NA	NA	NA	NA	NA	6 120	6 120	5 500	5 954	5 532	6 560	6 290
Fort Vermilion	NA	851	900	1 350	1 310	925	2 250	2 057	2 057	1 104	1 063	1 126	1 189
Grande Cache	1 380	1 380	1 520	1 469	1 278	1 291	1 438	1 443	1 326	1 251	1 152	1 166	1 118
Grand Centre/Cold Lake	NA	NA	NA	6 500	6 040	6 601	6 601	4 825	5 230	6 575	6 947	7 108	6 845
Grande Prairie	NA	12 231	13 764	13 940	14 817	13 625	12 532	12 909	10 543	8 946	9 120	9 724	10 369
Grimshaw	NA	NA	NA	NA	900	629	631	541	675	675	592	700	807
High Level	NA	965	1 250	1 350	1 278	1 077	1 109	1 118	1 216	1 279	1 340	1 489	1 637
High Prairie	NA	NA	NA	3 046	2 932	2 860	2 860	2 860	2 090	2 546	2 435	2 429	2 338
Lac La Biche	NA	NA	1 460	1 460	1 670	1 766	1 966	2 001	2 001	2 072	2 117	2 161	2 395
Manning	NA	NA	NA	1 300	1 098	1 102	1 154	1 239	1 239	1 181	1 149	1 108	1 066
Peace River	4 884	5 081	5 123	5 123	5 237	5 800	5 800	5 488	5 488	5 165	5 253	5 479	5 439
Rycroft	NA	NA	NA	NA	NA	NA	1 502	1 502	1 635	1 635	1 577	2 812	2 556
Slave Lake	NA	NA	NA	4 400	3 136	2 386	2 700	2 562	2 582	2 397	2 513	2 509	2 094
St. Paul	4 303	5 768	6 198	6 198	6 355	6 355	6 735	7 100	6 735	6 977	7 062	6 985	7 044
Swan Hills	NA	NA	NA	550	991	892	892	776	776	776	584	528	519
Valleyview	NA	1 887	1 899	2 200	2 445	2 541	2 459	2 507	2 546	2 570	2 413	2 476	2 458
Whitecourt	3 837	2 400	3 410	3 410	3 100	3 000	2 964	2 769	3 064	4 014	2 888	2 913	2 865
TOTAL	NA	NA	NA	NA	75 513	76 485	85 082	82 625	78 092	80 179	78 870	82 064	82 227
TOTAL	NA	NA	NA	NA	89 610	91 492	99 472	97 585	93 359	96 086	95 541	97 624	98 200
ANNUAL CHANGE (%)		NA	NA	NA	NA	2.1	8.7	-1.9	-4.3	2.9	-0.6	2.2	0.6
ALBERTA													
Daily	390 277	405 397	418 548	465 005	487 984	527 363	564 324	571 403	550 397	556 865	563 343	564 517	567 468
Weekly	NA	NA	NA	NA	NA	NA	363 617	350 548	379 161	408 874	358 288	382 317	401 395
TOTAL	NA	NA	NA	NA	NA	NA	927 941	921 951	929 558	965 739	921 631	946 834	968 863
ANNUAL CHANGE (%)		NA	NA	NA	NA	NA	NA	-0.6	0.8	3.9	-4.6	2.7	2.3
NADC AREA AS % OF ALBERTA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**10.7**	**10.6**	**10.0**	**9.9**	**10.4**	**10.3**	**10.1**

SOURCES:
- Canadian Daily Newspaper Publishers Association
- Alberta Weekly Newspapers Association

INDUSTRIAL DEVELOPMENT

Since 1983, Alberta Economic Development and Trade has tracked the development of major projects in Alberta (those with a capital investment of $100 million or more, or projects that diversify the provincial economy). From 1983 to 1988, a total of 62 such projects have been completed in Alberta, 19 of which were located in the NADC area.

L1 Major Industrial Projects by Sector

Over the past six years, the majority of the projects completed were in the oil, gas and oilsands sector, with 15 of the 19 projects in the NADC area. The remaining projects were in forestry (3) and petrochemicals (1). In the NADC area, six of the projects were completed in 1986 and seven in 1988.

L2 Capital Investment in Industrial Projects

The NADC area accounted for only 30% of the new projects completed in the province over the past six years. In 1988, however, approximately 96% ($1.8 billion) of total capital investment in Alberta went into projects in the NADC area. The majority of this investment ($1.6 billion) was in the oil, gas and oilsands sector. A significant increase in investment occurred in the forestry sector in 1988: expenditures reached $200 million, well over the $4 million invested in 1987 or the negligible investment in the previous two years.

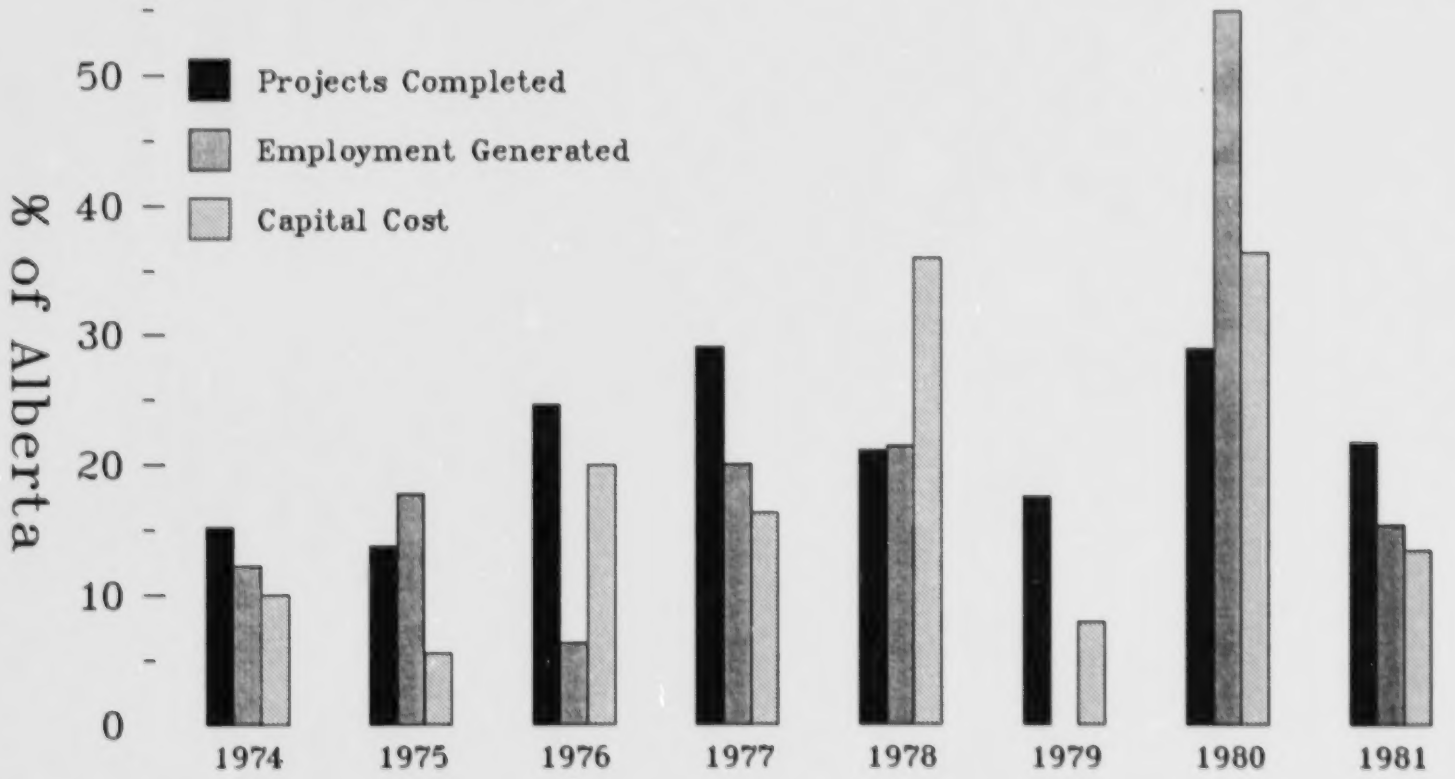
L3 Industrial Projects by Industry

Prior to 1983, industrial development was recorded in a different manner than is current practice: projects with a capital value of $100,000 or more were included. The largest growth areas in the NADC area in the late 1970s were agricultural processing and petroleum and petrochemicals which both saw a substantial number of new projects during this time. Petroleum projects represented 99.3 percent of the total capital cost of all projects in the NADC area in 1981.

The incremental employment generated from these industrial projects in the NADC area has been largely concentrated in a few industries, with agricultural processing and forestry dominating the mid-1970s, and forestry and petrochemicals the early 1980s. The industrial-related employment generated in the NADC area represented, on average, 21 percent of the total employment generated in the province from 1974 to 1981.

Figure L1

Industrial Projects, Employment and Capital Cost Relative to Alberta for the NADC Area



NOTE: This figure is based on incomplete data.
See notes for Table L3.

Figure L2

Capital Investment in Completed Industrial Projects

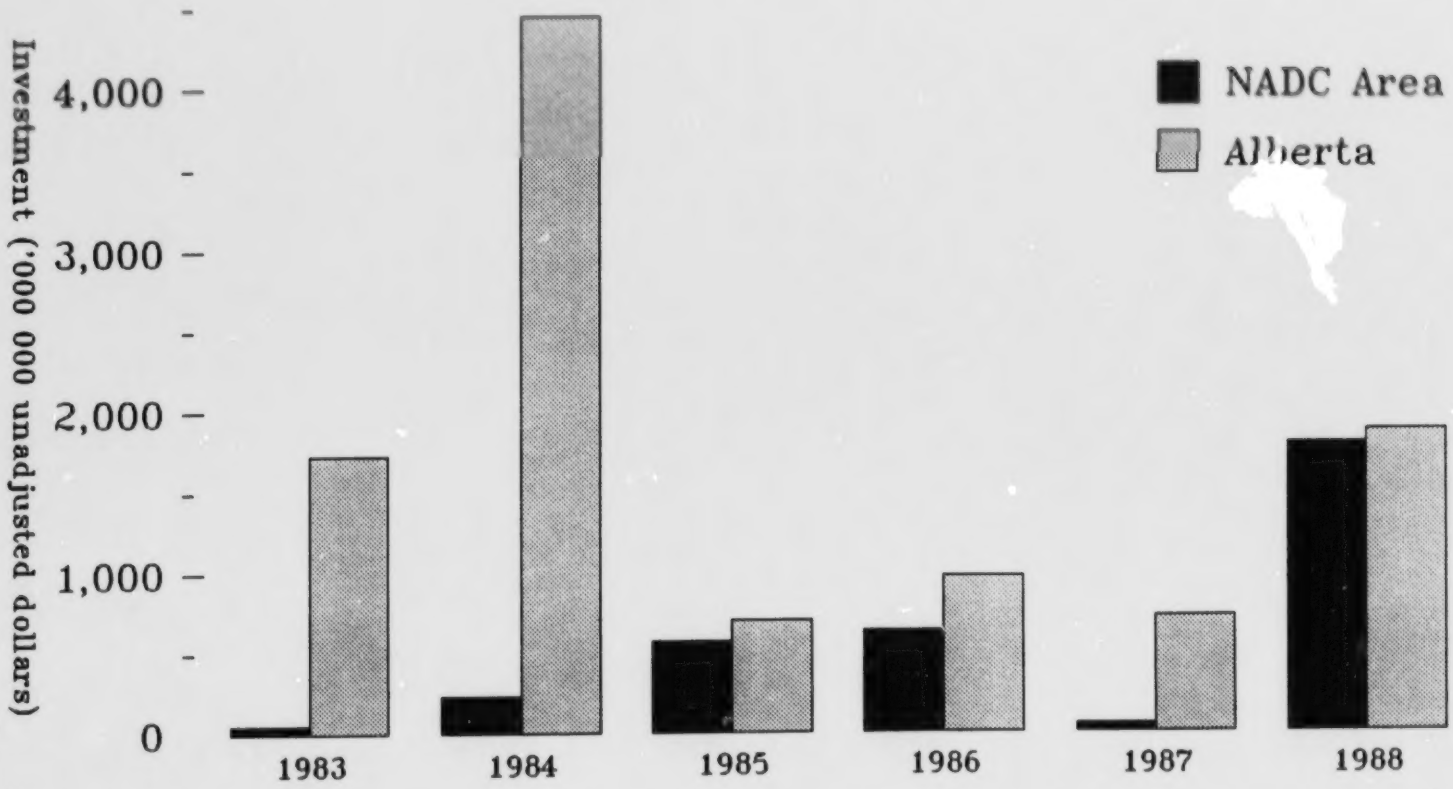


TABLE L1
Major Industrial Development Projects Completed by Sector

	1983	1984	1985	1986	1987	1988
NADC AREA						
Coal	0	0	0	0	0	0
Forestry	0	1	0	0	1	1
Oil, Gas & Oilsands	1	0	1	6	1	6
Petrochemicals	0	0	1	0	0	0
Pipelines	0	0	0	0	0	0
Power Plants	0	0	0	0	0	0
TOTAL	1	1	2	6	2	7
ANNUAL CHANGE (%)		0.0	100.0	200.0	-66.7	250.0
ALBERTA						
Coal	1	1	0	2	0	0
Forestry	0	1	0	1	1	1
Oil, Gas & Oilsands	5	5	2	9	4	8
Petrochemicals	3	2	1	3	5	2
Pipelines	0	0	1	0	3	0
Power Plants	0	1	0	0	0	0
TOTAL	9	10	4	15	13	11
ANNUAL CHANGE (%)		11.1	-60.0	275.0	-13.3	-15.4
NADC AREA AS % OF ALBERTA	**11.1**	**10.0**	**50.0**	**40.0**	**15.4**	**63.6**

SOURCE:
- Alberta Economic Development and Trade, Small Business and Industry Division

NOTES:
- Not all major projects are necessarily included.
- Only industrial projects of $100 million capital expenditure or more, or new diversification projects, are included.

TABLE L2
Capital Investment in (Completed) Industrial Projects by Sector
(Millions of Unadjusted Dollars)

	1983	1984	1985	1986	1987	1988
NADC AREA						
Coal	0	0	0	0	0	0
Forestry	0	230	0	0	4	200
Oil, Gas & Oilsands	50	0	120	641	50	1 602
Petrochemicals	0	0	450	0	0	0
Pipelines	0	0	0	0	0	0
Power Plants	0	0	0	0	0	0
TOTAL	50	230	570	641	54	1 802
ANNUAL CHANGE (%)		360.0	147.8	12.5	-91.6	3237.0
ALBERTA						
Coal	180	230	0	50	0	0
Forestry	0	230	0	33	4	200
Oil, Gas & Oilsands	725	2 530	155	811	95	1 622
Petrochemicals	820	460	550	82	195	60
Pipelines	0	0	0	0	427	0
Power Plants	0	1 000	0	0	0	0
TOTAL	1 725	4 450	705	976	721	1 882
ANNUAL CHANGE (%)		158.0	-84.2	38.4	-26.1	161.0
NADC AREA AS % OF ALBERTA	**2.9**	**5.2**	**80.9**	**65.7**	**7.5**	**95.7**

SOURCE:
- Alberta Economic Development and Trade, Small Business and Industry Division

NOTES:
- Not all major projects proposed for Alberta are necessarily included.
- Only industrial projects of $100 million capital expenditure or more, or new diversification projects, are included.
- Capital for some projects was spent over several years, although indicated only in the year of completion.

TABLE L3
Industrial Projects Completed, Employment Generated and Capital Cost by Industry

	PROJECTS COMPLETED								EMPLOYMENT GENERATED								CAPITAL COST ($'000)							
	1974	1975	1976	1977	1978	1979	1980	1981	1974	1975	1976	1977	1978	1979	1980	1981	1974	1975	1976	1977	1978	1979	1980	1981
NADC AREA																								
Agricultural Processing	6	4	3	6	1	2	14	16	116	112	60	95	5	10	12	90	4 400	5 900	14 042	14 382	250	250	10 000	590
Forestry	3	3	0	4	2	1	5	7	93	305	0	240	NA	NA	260	232	4 480	13 200	0	26 700	718	NA	24 000	NA
Mining	0	1	0	1	0	0	9	8	0	100	0	0	0	0	NA	NA	0	NA	0	13 352	0	0	NA	NA
Other Manufacturing	3	2	0	0	0	0	NA	NA	14	29	0	0	0	0	43	39	1 400	400	0	0	0	0	3 000	150
Petroleum/Petrochemicals	0	3	19	20	27	20	45	29	0	NA	48	56	217	22	1 029	253	0	8 350	59 950	75 625	296 161	28 456	463 000	723 127
Transportation/Distribution	0	0	0	0	1	NA	20	0	0	0	0	0	0	NA	1	0	0	0	0	0	1 000	12 682	4 000	0
Utilities	0	0	0	1	1	1	5	11	0	0	0	NA	0	NA	1	6	0	0	0	NA	13 167	1 000	3 000	4 033
TOTAL	12	13	22	32	32	24	98	71	223	546	108	391	222	NA	1 346	620	10 280	28 050	73 992	130 059	311 294	42 388	507 000	727 900
ANNUAL CHANGE (%)		8.3	69.2	45.5	0.0	-25.0	308.3	-27.6		144.8	-80.2	262.0	-43.2	NA	NA	-53.9		172.9	163.8	75.8	139.3	-86.4	1096.1	43.6
ALBERTA																								
Agricultural Processing	20	24	10	21	15	15	70	66	393	407	108	183	55*	94	94	281	12 940	38 170	17 027	20 057	6 265*	22 750	119 000	150 198
Forestry	4	5	0	4	2	1	9	8	173	334	0	240	NA	NA	337	432	5 780	13 510	0	26 700	718*	NA	30 000	23 284
Mining	0	2	0	1	1	1	0	5	0	112	0	0	0	NA	0	NA	0	130	0	13 352	NA	NA	0	13 000
Other Manufacturing	55	46	40	38	19	19	71	89	1 269	1 632	1 505	1 014	542	645	652	2 002	84 340	66 470	70 537	53 036	42 277*	30 405	177 000	285 059
Petroleum/Petrochemicals	0	17	37	43	88	70	130	102	0	589	87	462	336*	129	1 207	1 175	0	387 340	90 950	606 683	331 223*	258 840	948 000	4 591 699
Transportation/Distribution	0	0	0	1	10	16	29	29	0	0	0	30	50	33	1	33	0	0	0	1 210	77 050*	205 189	64 000	3 334
Utilities	0	1	2	2	16	14	29	26	0	0	24	20	48	8	125	116	0	2 000	191 000	79 000	207 089*	17 770	51 000	310 269
TOTAL	79	95	89	110	151	136	338	325	1 835	3 074	1 724	1 949	1 031	909	2 416	4 039	103 060	507 640	369 514	800 038	964 622	534 934	1 390 000	5 376 843
ANNUAL CHANGE (%)		20.3	-6.3	23.6	37.3	-9.9	148.5	-3.8		67.5	-43.9	13.1	-47.1	-11.8	165.8	67.2		392.6	-27.2	116.5	8.1	-38.1	159.8	286.8
NADC AREA AS % OF ALBERTA	15.2	13.7	24.7	29.1	21.2	17.6	29.0	21.8	12.2	17.8	6.3	20.1	21.5	NA	55.7	15.4	10.0	5.5	20.0	16.3	36.0	7.9	36.5	13.5

SOURCE:
- Alberta Economic Development and Trade, Small Business and Industry Division (1979-81)
- Trends 1971-79 (1974-78)

NOTES:
- Includes projects of $100,000 capital expenditure or more.
- Totals marked with * have been reduced because of confidentiality.
- Data for 1974 to 1978 includes data for Census Divisions 12, 13 and 15 and are not adjusted for the NADC boundary.
- Data for 1979 to 1981 are adjusted for the NADC boundary.

MANUFACTURING, RETAIL AND SERVICE TRADE

Introduction

The NADC area continues to provide a substantial share of Alberta's industries and businesses. Diversification in the form of new types of manufacturing operations has increased, and retail and service outlets have remained stable over the period from 1975 to 1984.

M1/M2 Manufacturing Establishments

Highlights, 1971 to 1983

- Northern Alberta's share of the number of manufacturing establishments decreased from 14.7 percent (1971) to 6.5 percent (1983) of the provincial total.
- The number of food and beverage establishments in northern Alberta dropped considerably to an all-time low of 27 operations in 1983. The wood sector followed suit with an even more dramatic drop of 78 percent to 45 operations by 1983.
- Printing and publishing operations in northern Alberta more than doubled from 14 in 1976 to 30 by 1983.
- Non-metallic minerals and miscellaneous manufacturing both rose, representing an increase in the diversification of the manufacturing base of the north from 1971 to 1983.

M3 Value Added by Manufacturing Establishments

The value added by manufacturing establishments varied significantly over the 14-year period of 1971 to 1985, with dramatic increases in the early 1970s and again in 1983. By 1985, the northern region accounted for $260 million, or a 4.9 percent share, of the provincial total. The average northern region percentage of the provincial total from 1971 to 1985 has been 4.9 percent, with highs of 6.0 and 5.8 percent in 1973 and 1978, respectively, and lows of 3.5 and 3.6 percent in 1971 and 1981, respectively.

M4/M5 Retail and Service Trade Establishments

Highlights

- In 1984 there were 2,946 retail and service outlets in the northern region, accounting for 13 percent of the provincial total.
- The municipalities with the largest number of outlets in 1985 were Grande Prairie (347), MD 87: Bonnyville (278) and Fort McMurray (262), all of which experienced decreases from 1984.
- The largest number of retail outlets in both the northern region and Alberta continues to be in the automotive business sector.
- The largest category in the service sector in the northern region and Alberta continues to be the accommodation and food industry, with the highest number (496) recorded in the past 10 years for the northern region.

M6 Business Bankruptcies

The north has had a fair share of the province's bankruptcies over the years. In 1988, just over 10 percent of the total business bankruptcies in Alberta occurred in the NADC area. Just over 30 percent of the total for the north were in the cities of Grande Prairie and Fort McMurray.

Figure M1

Manufacturing Establishments

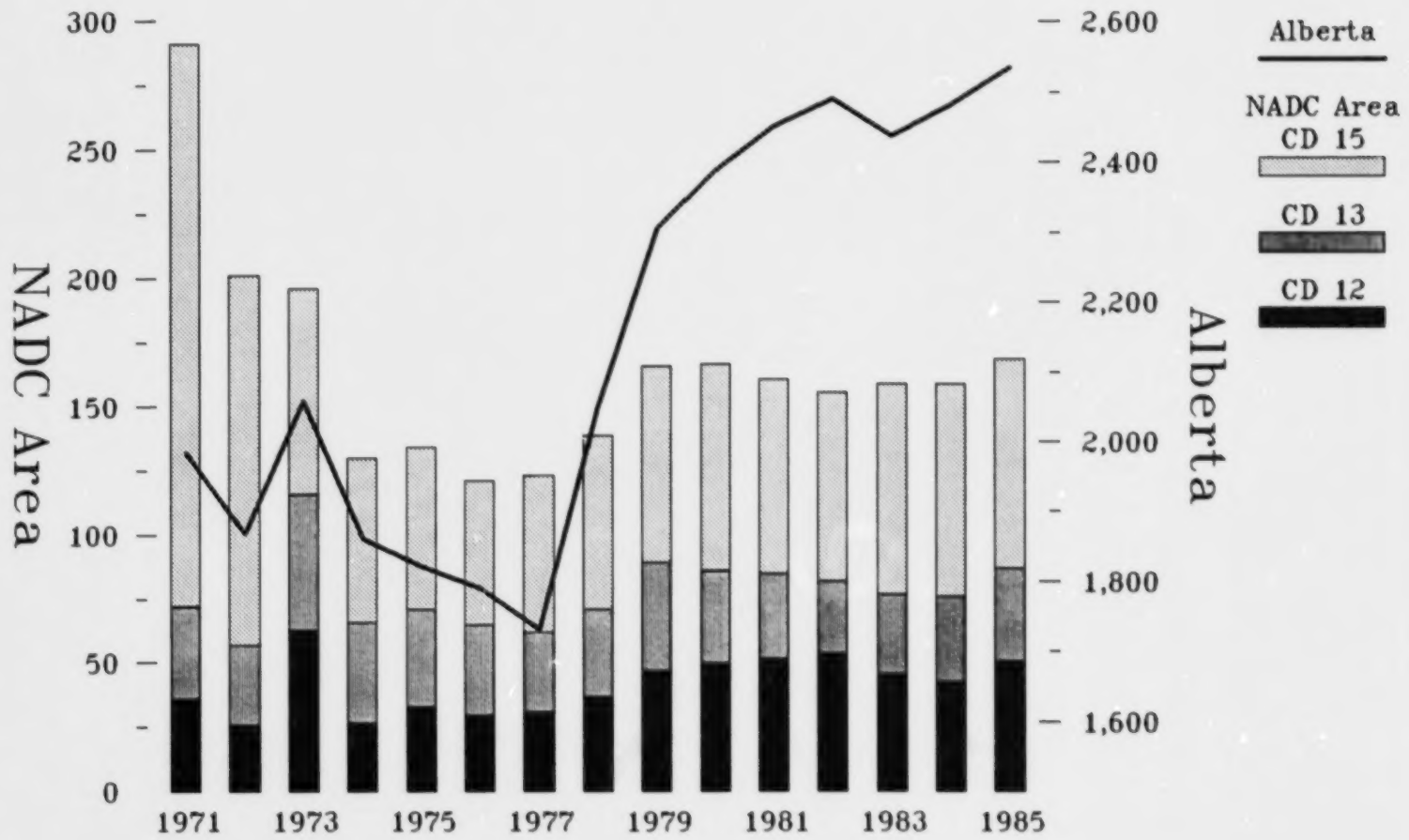


TABLE M1
Manufacturing Establishments

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
NORTHERN REGION													
Chemical Products	1	1	1	1	1	1	2	3	3	2	3	2	3
Clothing	NA	NA	NA	NA	NA	NA	NA	2	2	2	3	3	4
Food and Beverage	47	47	46	47	47	45	44	40	47	43	39	36	27
Furniture & Fixtures	4	3	4	4	4	4	4	6	11	10	9	8	4
Machinery Industries	0	1	0	0	0	0	0	0	2	3	2	1	3
Metal Fabricating	5	6	6	6	7	8	9	10	12	13	12	11	13
Misc. Manufacturing	2	2	1	3	5	6	6	6	6	6	7	8	10
Non-Metallic Minerals	10	9	9	10	12	10	11	18	18	18	19	20	19
Printing/Publishing	14	14	15	15	18	14	16	22	27	25	26	28	30
Transportation	3	1	1	1	1	0	1	3	3	4	2	1	1
Wood	205	117	113	43	39	33	30	29	35	41	39	38	45
TOTAL	291	201	196	130	134	121	123	139	166	167	161	156	159
ANNUAL CHANGE (%)													
Chemical Products		0.0	0.0	0.0	0.0	0.0	100.0	50.0	0.0	-33.3	50.0	-33.3	50.0
Clothing		NA	NA	NA	NA	NA	NA	NA	0.0	0.0	50.0	0.0	33.3
Food and Beverage		0.0	-2.1	2.2	0.0	-4.3	-2.2	-9.1	17.5	-8.5	-9.3	-7.7	-25.0
Furniture & Fixtures		-25.0	33.3	0.0	0.0	0.0	0.0	50.0	83.3	-9.1	-10.0	-11.1	-50.0
Machinery Industries		*	-100.0	0.0	0.0	0.0	0.0	0.0	*	50.0	-33.3	-50.0	200.0
Metal Fabricating		20.0	0.0	0.0	16.7	14.3	12.5	11.1	20.0	8.3	-7.7	-8.3	18.2
Misc. Manufacturing		0.0	-50.0	200.0	66.7	20.0	0.0	0.0	0.0	0.0	16.7	14.3	25.0
Non-Metallic Minerals		-10.0	0.0	11.1	20.0	-16.7	10.0	63.6	0.0	0.0	5.6	5.3	-5.0
Printing/Publishing		0.0	7.1	0.0	20.0	-22.2	14.3	37.5	22.7	-7.4	4.0	7.7	7.1
Transportation		-66.7	0.0	0.0	0.0	-100.0	*	200.0	0.0	33.3	-50.0	-50.0	0.0
Wood		-42.9	-3.4	-61.9	-9.3	-15.4	-9.1	-3.3	20.7	17.1	-4.9	-2.6	18.4
TOTAL		-30.9	-2.5	-33.7	3.1	-9.7	1.7	13.0	19.4	0.6	-3.6	-3.1	1.9
ALBERTA	1 983	1 868	2 058	1 860	1 821	1 790	1 731	2 050	2 305	2 388	2 452	2 490	2 437
ANNUAL CHANGE		-5.8	10.2	-9.6	-2.1	-1.7	-3.3	18.4	12.4	3.6	2.7	1.5	-2.1
NORTHERN REGION AS % OF ALBERTA	14.7	10.8	9.5	7.0	7.4	6.8	7.1	6.8	7.2	7.0	6.6	6.3	6.5

SOURCES:
- Alberta Bureau of Statistics, Alberta Principal Manufacturing Statistics (1978-83)
- Trends 1971-79 (1971-77)

NOTES:
- Northern Region data are based on totals for Census Divisions 12, 13 & 15.
- * denotes an annual change from zero to a number greater than zero (i.e., undefined)

TABLE M2
Manufacturing Establishments by Census Division

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
NORTHERN REGION															
CD 12	36	26	63	27	33	30	31	37	47	50	52	54	46	43	51
CD 13	36	31	53	39	38	35	31	34	42	36	33	28	31	33	36
CD 15	219	144	80	64	63	56	61	68	77	81	76	74	82	83	82
TOTAL	291	201	196	130	134	121	123	139	166	167	161	156	159	159	169
ANNUAL CHANGE (%)		-30.9	-2.5	-33.7	3.1	-9.7	1.7	13.0	19.4	0.6	-3.6	-3.1	1.9	0.0	6.3
ALBERTA	1 983	1 868	2 058	1 860	1 821	1 790	1 731	2 050	2 305	2 388	2 452	2 490	2 437	2 482	2 536
ANNUAL CHANGE (%)		-5.8	10.2	-9.6	-2.1	-1.7	-3.3	18.4	12.4	3.6	2.7	1.5	-2.1	1.8	2.2
NORTHERN REGION AS % OF ALBERTA	**14.7**	**10.8**	**9.5**	**7.0**	**7.4**	**6.8**	**7.1**	**6.8**	**7.2**	**7.0**	**6.6**	**6.3**	**6.5**	**6.4**	**6.7**

SOURCES:
- Statistics Canada, Manufacturing Industries of Canada: Sub Provincial Areas (1984,1985), Cat. 31-209
- Alberta Bureau of Statistics, Alberta Principal Manufacturing Statistics (1978-83)
- Trends (1971-77)

NOTE:
- For 1985, Census Division 12 data are the sums of the new Census Divisions 12 and 16, while Census Division 15 data are the sums of the new Census Divisions 17, 18 and 19.

TABLE M3
Value Added by Manufacturing Establishments by Census Division
(Thousands of Unadjusted Dollars)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
NORTHERN REGION															
CD 12	1 774	2 519	5 601	4 690	5 074	5 537	8 177	18 590	20 775	22 279	16 768	15 461	18 405	17 102	21 329
CD 13	9 116	9 278	13 636	15 897	18 031	22 444	21 476	10 959	30 252	23 047	26 876	17 281	30 193	35 757	37 274
CD 15	15 392	28 281	41 836	47 390	40 677	55 048	74 850	112 814	103 204	106 911	106 456	108 532	165 109	196 345	202 115
TOTAL	26 282	40 078	61 073	67 977	63 782	83 029	104 503	142 363	154 231	152 237	150 100	141 274	213 707	249 204	260 718
ANNUAL CHANGE (%)		52.5	52.4	11.3	-6.2	30.2	25.9	36.2	8.3	-1.3	-1.4	-5.9	51.3	16.6	4.6
ALBERTA	742 558	823 377	1 016 358	1 262 319	1 581 096	1 744 554	1 947 104	2 437 438	2 888 358	3 252 405	4 185 114	3 801 812	3 912 530	4 402 735	5 348 405
ANNUAL CHANGE (%)		10.9	23.4	24.2	25.3	10.3	11.6	25.2	18.5	12.6	28.7	-9.2	2.9	12.5	21.5
NORTHERN REGION AS % OF ALBERTA	3.5	4.9	6.0	5.4	4.0	4.8	5.4	5.8	5.3	4.7	3.6	3.7	5.5	5.7	4.9

SOURCE:
- Statistics Canada, Manufacturing Industries of Canada: Sub Provincial Areas (1984,1985), Cat. 31-209
- Alberta Bureau of Statistics, Alberta Principal Manufacturing Statistics (1978-83)
- Trends (1971-77)

NOTE:
- For 1985, Census Division 12 data are the sums of the new Census Divisions 12 & 16, while Census Division 15 data are the sums of the new Census Divisions 17, 18 and 19.

TABLE M4
Retail and Service Establishments by Type

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
NORTHERN REGION										
Retail Trade										
Food & Beverage	149	191	197	NA	217	215	200	276	258	344
General Merchandise	379	356	305	NA	332	322	306	293	271	267
Automotive	483	503	509	NA	566	555	543	534	474	616
Apparel & Accessories	102	147	158	NA	178	183	181	169	151	179
Hardware & Furnishings	195	205	227	NA	272	267	301	137	123	171
Other Retail Services	607	322	356	NA	436	426	398	344	306	418
TOTAL	1 915	1 724	1 752	NA	2 001	1 968	1 929	1 753	1 583	1 995
Service Trade										
Accommodation & Food	344	404	409	NA	430	466	476	417	393	496
Amusement & Recreation	16	27	43	NA	48	55	49	42	37	37
Personal Services	169	185	188	NA	226	221	206	173	159	227
Misc. Services	20	48	102	NA	102	102	98	89	87	191
TOTAL	549	664	742	NA	806	844	829	721	676	951
TOTAL	2 464	2 388	2 494	NA	2 807	2 812	2 758	2 474	2 259	2 946
ANNUAL CHANGE (%)		-3.1	4.4	NA	NA	0.2	-1.9	-10.3	-8.7	30.4
ALBERTA										
Retail Trade										
Food & Beverage	1 492	1 761	1 783	1 812	1 842	1 830	1 791	2 338	2 318	2 809
General Merchandise	1 190	1 126	996	989	1 096	1 100	1 085	1 039	962	957
Automotive	3 220	3 406	3 378	3 512	3 690	3 697	3 627	3 559	3 314	4 134
Apparel & Accessories	1 100	1 399	1 500	1 546	1 673	1 702	1 725	1 710	1 623	1 815
Hardware & Furnishings	1 668	1 785	1 877	1 940	2 034	2 028	2 150	1 175	1 158	1 431
Other Retail Services	4 608	3 317	3 465	3 639	3 923	3 908	3 816	3 310	3 030	3 562
TOTAL	13 278	12 794	12 999	13 438	14 258	14 265	14 194	13 131	12 405	14 708
Service Trade										
Accommodation & Food	2 581	2 917	3 143	3 106	3 220	3 478	3 615	3 330	3 246	3 942
Amusement & Recreation	122	270	310	305	294	293	282	262	245	268
Personal Services	1 888	2 047	2 086	2 061	2 119	2 102	1 989	1 785	1 676	2 242
Misc. Services	183	347	1 044	997	853	837	798	709	681	1 293
TOTAL	4 774	5 581	6 583	6 469	6 486	6 710	6 684	6 086	5 848	7 745
TOTAL	18 052	18 375	19 582	19 907	20 744	20 975	20 878	19 217	18 253	22 453
ANNUAL CHANGE (%)		1.8	6.6	1.7	4.2	1.1	-0.5	-8.0	-5.0	23.0
NORTHERN REGION AS % OF ALBERTA	13.6	13.0	12.7	NA	13.5	13.4	13.2	12.9	12.4	13.1

SOURCE:
- Alberta Bureau of Statistics, Alberta Retail and Service Trade Statistics

NOTE:
- Northern Region data based on totals for Census Divisions 12, 13 & 15.

TABLE M5
Retail and Service Outlets by Municipality

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
NADC AREA										
Athabasca	68	64	65	63	67	66	59	56	78	74
Beaverlodge	31	31	32	33	34	40	36	33	32	24
Berwyn	NA	10	0	11	11	11	9	8	10	NA
Bonnyville	75	76	78	92	97	92	80	72	126	128
Boyle	28	25	24	28	28	31	28	25	27	19
Cold Lake	25	24	24	27	20	17	16	15	19	17
CO 1 - Grande Prairie	83	85	93	98	99	105	87	79	77	59
CO 12 - Athabasca	128	116	115	118	124	125	113	103	133	111
CO 19 - St. Paul	154	154	153	156	150	152	145	134	195	172
Donnelly	7	6	5	7	8	8	8	8	8	NA
Eaglesham	6	7	8	6	6	6	6	6	6	5
Elk Point	25	26	26	26	27	30	30	28	30	25
Fairview	40	48	56	61	63	61	56	51	48	38
Falher	33	33	42	38	37	37	35	32	30	21
Fort Assiniboine	7	6	8	9	9	12	12	12	16	NA
Fort McMurray	127	181	188	239	244	234	202	196	299	262
Fox Creek	20	21	22	24	23	23	20	18	18	13
Girouxville	8	8	8	8	10	9	9	9	9	4
Glendon	17	15	17	19	17	17	17	15	22	22
Grand Centre	66	69	77	76	79	83	77	71	111	98
Grande Cache	25	31	32	33	36	34	33	30	31	27
Grande Prairie	225	269	283	304	313	311	277	268	408	347
Grimshaw	39	34	37	41	42	41	35	32	29	26
High Level	29	33	37	39	43	38	35	34	34	29
High Prairie	53	64	68	76	75	73	67	63	61	48
Hines Creek	18	11	16	18	20	22	21	19	17	9
Hythe	16	16	17	20	20	21	15	15	17	11
ID 15	82	76	83	97	98	108	94	80	138	118
ID 16	113	124	128	129	128	117	106	97	99	77
ID 17	310	333	351	372	355	339	307	283	279	227
ID 18	233	283	289	353	109	107	93	88	129	109
ID 19	18	18	19	16	17	16	15	14	14	11
ID 20	7	9	9	9	9	8	8	8	8	8
ID 21	31	22	28	30	31	34	30	27	24	13
ID 22	41	51	53	53	55	54	50	47	44	32
ID 23	65	74	77	87	94	88	84	79	73	61
Kinuso	15	14	14	13	12	12	10	9	8	NA
Lac La Biche	48	50	57	66	59	66	57	54	85	72

TABLE M5
Retail and Service Outlets by Municipality

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Manning	30	39	41	42	45	45	43	41	39	27
McLennan	10	10	11	12	15	13	12	11	11	7
MD 13 - Smoky River	64	63	74	73	75	73	67	63	61	39
MD 133 - Spirit River	35	38	42	43	44	44	44	42	41	36
MD 135 - Peace	52	46	50	55	56	55	46	42	40	36
MD 136 - Fairview	51	57	66	72	73	70	65	58	54	41
MD 87 - Bonnyville	208	208	221	240	235	230	206	185	292	278
Nampa	4	7	7	6	4	6	6	5	4	5
Peace River	99	115	117	121	118	115	104	96	99	84
Plamondon	9	8	6	9	6	6	5	5	10	6
Rainbow Lake	3	4	6	8	7	6	6	6	3	3
Rycroft	13	14	15	14	19	19	19	19	18	16
Sexsmith	13	14	15	17	17	17	16	12	11	10
Slave Lake	54	59	64	66	64	60	54	52	52	45
Spirit River	22	24	27	29	25	25	25	23	23	20
St. Paul	93	99	97	98	93	92	87	78	133	121
Swan Hills	13	13	14	23	21	17	18	15	14	14
Valleyview	50	54	53	53	50	43	39	36	38	29
Wanham	7	7	7	7	8	7	6	6	6	NA
Wembley	5	7	7	9	9	7	3	3	4	4
Whitecourt	70	66	71	83	83	90	77	66	120	108

SOURCE:
- Alberta Bureau of Statistics

NOTES:
- Numbers may vary due to sampling strategy and methodology; areas of coverage may have changed over the reported years.
- Data reported for rural municipalities include urban areas; thus, the figures for some rural areas are inflated and totals for this table are not included.

TABLE M6
Business Bankruptcies
by Postal Code (PC) Area

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NADC AREA											
PC: T0A (North-East)	1	6	5	10	14	29	19	28	31	20	22
PC: T0G (North-Central)	3	5	8	13	14	16	19	28	29	17	20
PC: T0H (North-West)	6	9	11	8	20	25	31	29	22	22	26
Grande Prairie	4	1	7	16	8	14	24	20	20	14	15
Fort McMurray	2	8	7	9	8	14	10	8	7	15	15
TOTAL	16	29	38	56	64	98	103	113	109	88	98
ANNUAL CHANGE (%)		81.3	31.0	47.4	14.3	53.1	5.1	9.7	-3.5	-19.3	11.4
ALBERTA	325	382	445	619	742	1 038	1 154	1 157	1 168	991	967
ANNUAL CHANGE (%)		17.5	16.5	39.1	19.9	39.9	11.2	0.3	1.0	-15.2	-2.4
NADC AREA AS % OF ALBERTA	4.9	7.6	8.5	9.0	8.6	9.4	8.9	9.8	9.3	8.9	10.1

SOURCE:
- Consumer and Corporate Affairs Canada, Bankruptcy Branch

AGRICULTURE

Introduction

Some significant changes took place in agriculture in the NADC area and the province from 1971 to 1986. Land tenure and uses, types of crops grown, livestock numbers, farm population and farm economics have all evolved to some extent over this 15-year period. With 20 percent of the province's farms, the NADC area accounts for a substantial portion of Alberta's agricultural output.

Statistics Canada changed the definition of census-farm in 1976 and in 1981. A 1976 census-farm is an agricultural holding with sales of farm products during the year 1975 of $1,200 or more. A 1971 census-farm sold farm products worth $50 or more in the year ending June 1st. 1981 and 1986 census-farms sold farm products worth $250 or more in the year ending June 3rd.

N1 Farm Land Tenure, Operator and Population

Highlights

- The number of farms in the NADC area dropped by 805 from 1971 to 1976, and then rose by 281 from 1976 to 1986. The average size of farms increased from 270 to 332 hectares from 1971 to 1986.
- Total farm area in the NADC area rose 18 percent from 1971 to 1986 to over 4 million hectares in 1986.

N2 Farm Land Use and Type

Highlights

- Land under crops in the NADC area comprised the largest portion of the total improved lands (71 percent in 1986).
- 20 percent of the total improved farmland and 19 percent of the total unimproved farmland in Alberta in 1986 were found in the NADC area.
- From 1971 to 1986 total improved lands increased 27 percent, while the increase in total unimproved lands was only 5 percent in the NADC area.

N3 Field Crops

Highlights

- The largest producer by hectares continued to be barley in the NADC area. However, a drop of 90 000 hectares occurred between 1981 and 1986.
- Oilseed crops in the NADC area increased 164 percent since 1976, when 137 000 hectares were grown, to over 362 000 hectares in 1986.
- 31 percent of the provincial oilseed production, 15 percent of Alberta's coarse grains production and 24 percent of Alberta's hay crops were produced in the NADC area in 1986.

N4 Selected Livestock Populations

Highlights

- Total livestock populations in the NADC area have declined steadily since 1971, dropping 17 percent by 1986.
- Cattle and calf populations in the NADC area increased 42 percent over the fifteen-year period.
- The number of pigs in the NADC area dropped by 62 percent between 1971 and 1986, and accounted for less than 8 percent of the total provincial pig population in 1986.
- The number of turkeys in the NADC area fell by 83 percent from a peak of over 56,000 in 1971 and accounted for just over 1 percent of the total number of turkeys raised in Alberta in 1986.

N5 Farm Sales, Capital, Expenses

1986 figures for the NADC area show that farm sales jumped almost 50 percent from 1981 and accounted for 11 percent of total Alberta farm sales. Capital assets decreased by 14 percent from 1981 to 1986 and accounted for over 13 percent of the provincial total in 1986.

N6 Age of Farm Operators

Highlights

- The largest age group of farm operators continues to be the 45-54 age range. The 35-44 and 25-34 age ranges follow with a combined total of 42 percent of all NADC area farm operators in 1986.
- The under-25 age category represented only 3 percent of total farm operators in the NADC area in 1986, but constituted 23 percent of all operators in that age range in Alberta.

Figure N1
Field Crops

Figure N2

Selected Livestock Populations, as % of Alberta for the NADC Area

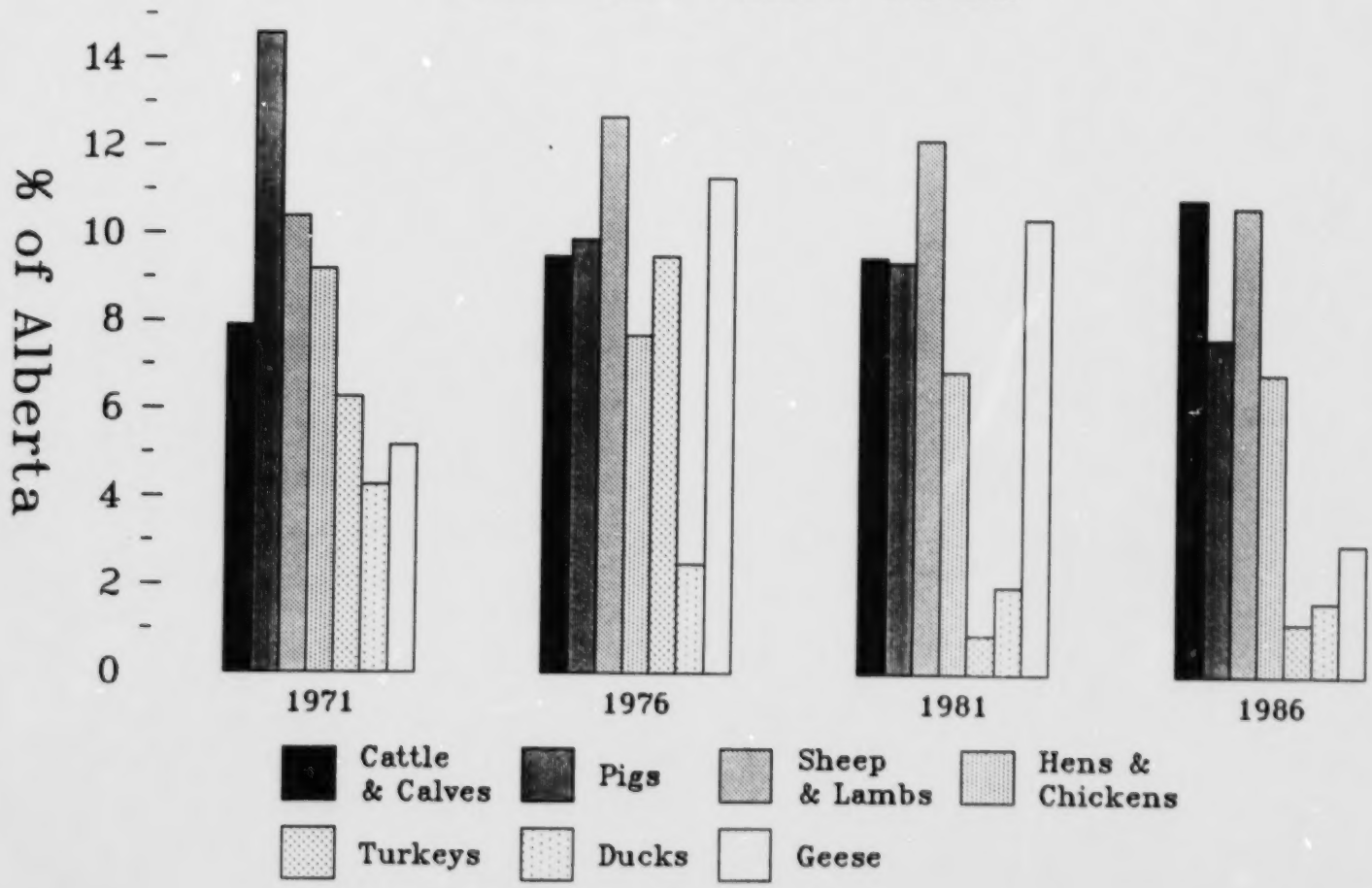


TABLE N1
Farm Land Tenure, Operator and Population by Type
(Hectares)

	1971	1976	1981	1986
NADC AREA				
Area	3 404 716	3 575 727	3 401 430	4 015 982
Owned	2 489 896	2 636 032	2 565 335	2 515 595
Rented	914 820	939 695	836 095	1 500 387
Average Area Per Farm	270	303	283	332
Number Of Farms	12 613	11 808	12 008	12 089
Owner Operated	8 052	7 606	7 859	NA
Tenant Operated	632	504	474	NA
Owner/Tenant Operated	3 929	3 698	3 675	NA
Farm Population	NA	36 498	41 659	NA
ALBERTA				
Area	20 034 481	20 039 981	19 108 536	20 655 340
Owned	12 833 581	12 844 338	12 408 920	12 053 840
Rented	7 200 900	7 195 643	6 699 616	8 601 500
Average Area Per Farm	320	350	329	358
Number Of Farms	62 702	57 310	58 056	57 777
Owner Operated	37 193	33 584	33 850	NA
Tenant Operated	4 225	3 520	3 675	NA
Owner/Tenant Operated	21 284	20 206	20 531	NA
Farm Population	NA	190 785	195 284	NA
NADC AREA AS % OF ALBERTA				
Area	17.0	17.8	17.8	19.4
Owned	19.4	20.5	20.7	20.9
Rented	12.7	13.1	12.5	17.4
Average Area Per Farm	84.5	86.6	86.1	92.7
Number Of Farms	20.1	20.6	20.7	20.9
Owner Operated	21.6	22.6	23.2	NA
Tenant Operated	15.0	14.3	12.9	NA
Owner/Tenant Operated	18.5	18.3	17.9	NA
Farm Population	NA	19.1	21.3	NA

SOURCE:
- Census of Agriculture (1981, 1986)
- Trends 1971-1979 (1971, 1976)

NOTES:
- NADC area totals have been calculated from municipal breakdowns published in the sources.
- Area data have been converted from Imperial acres using the conversion 1 Hectare = 0.4046856 Acre.
- Adjustments have been made to the 1971 census data to accommodate changes to the definition of census-farm between 1971 and 1976.

Table N2
Farm Land Use
by Type
(Hectares)

	1971	1976	1981	1986
NADC AREA				
Improved Lands	1 990 767	2 115 645	2 288 186	2 527 172
Crops	1 394 768	1 442 922	1 620 762	1 795 611
Pasture	142 513	199 208	238 024	269 153
Summerfallow	403 451	419 217	357 816	408 659
Other	50 035	54 298	71 584	53 748
Unimproved Lands	1 413 949	1 460 082	1 113 244	1 488 810
Woodland	282 806	311 871	228 216	143 515
Other	1 131 143	1 148 211	885 028	1 345 295
Total Farm Area	3 404 716	3 575 727	3 401 430	4 015 982
ALBERTA				
Improved Lands	11 517 485	11 790 925	12 525 481	12 906 037
Crops	7 321 792	7 614 120	8 441 242	9 162 524
Pasture	1 110 838	1 310 083	1 581 443	1 376 814
Summerfallow	2 836 326	2 610 730	2 205 468	2 127 013
Other	248 530	255 992	297 329	239 686
Unimproved Lands	8 516 996	8 249 057	6 583 054	7 749 303
Woodland	674 241	683 094	492 672	288 824
Other	7 842 756	7 565 962	6 090 382	7 460 479
Total Farm Area	20 034 481	20 039 981	19 108 536	20 655 340
NADC AREA AS % OF ALBERTA				
Improved Lands	17.3	17.9	18.3	19.6
Crops	19.0	19.0	19.2	19.6
Pasture	12.8	15.2	15.1	19.5
Summerfallow	14.2	16.1	16.2	19.2
Other	20.1	21.2	24.1	22.4
Unimproved Lands	16.6	17.7	16.9	19.2
Woodland	41.9	45.7	46.3	49.7
Other	14.4	15.2	14.5	18.0
Total Farm Area	17.0	17.8	17.8	19.4

SOURCES:
- Census of Agriculture (1981, 1986)
- Trends 1971-1979 (1971, 1976)

NOTES:
- NADC area totals have been calculated from municipal breakdowns published in the sources.
- Area data have been converted from Imperial acres using the conversion 1 Hectare = 0.04046856 Acre.
- Totals have been rounded independently and may not add.
- Adjustments have been made to the 1971 census data to accommodate changes to the definition of census-farm between 1971 and 1976.

TABLE N3
Field Crops
(Hectares)

	1971	1976	1981	1986
NADC AREA				
Coarse Grains				
Wheat	148 483	184 954	319 607	292 925
Barley	374 691	558 041	562 252	471 930
Oats	108 056	126 665	112 215	103 548
Rye	3 507	1 474	2 880	3 247
Mixed Grain	29 882	14 902	10 254	8 099
TOTAL	664 620	886 036	1 007 209	879 749
Hay	358 521	386 343	356 571	360 062
Oilseeds				
Canola	306 803	130 831	206 452	360 617
Flaxseed	10 345	6 327	6 712	1 875
TOTAL	317 148	137 158	213 164	362 492
TOTAL	1 340 288	1 409 537	1 576 943	1 602 303
ALBERTA				
Coarse Grains				
Wheat	1 393 458	2 243 121	2 713 593	3 076 298
Barley	2 302 141	2 275 884	2 603 325	2 253 264
Oats	754 378	724 416	530 576	478 915
Rye	100 947	73 032	118 572	86 441
Mixed Grain	169 518	108 138	58 856	49 533
TOTAL	4 720 443	5 424 592	6 024 923	5 944 452
Hay	1 319 416	1 540 717	1 408 577	1 511 141
Oilseeds				
Canola	804 363	299 397	588 901	1 134 220
Flaxseed	109 570	29 656	41 418	34 225
TOTAL	913 933	329 052	630 318	1 168 445
TOTAL	6 953 792	7 294 362	8 063 818	8 624 039
NADC AREA AS % OF ALBERTA				
Coarse Grains				
Wheat	10.7	8.2	11.8	9.5
Barley	16.3	24.5	21.6	20.9
Oats	14.3	17.5	21.1	21.6
Rye	3.5	2.0	2.4	3.8
Mixed Grain	17.6	13.8	17.4	16.4
TOTAL	14.1	16.3	16.7	14.8
Hay	27.2	25.1	25.3	23.8
Oilseeds				
Canola	38.1	43.7	35.1	31.8
Flaxseed	9.4	21.3	16.2	5.5
TOTAL	34.7	41.7	33.8	31.0
TOTAL	19.3	19.3	19.6	18.6

SOURCE:
- Census of Agriculture

NOTES:
- NADC area totals have been calculated from municipal breakdowns published in the sources.
- Area data have been converted from Imperial acres using the conversion 1 Hectare = 0.04046856 Acre.
- Totals have been rounded independently and may not add.

TABLE N4
Selected Livestock Populations

	1971	1976	1981	1986
NADC AREA				
Cattle & Calves	293 853	435 289	399 220	416 897
Pigs	291 779	95 557	112 520	111 933
Sheep & Lambs	25 369	23 707	24 570	19 087
Hens & Chickens	726 314	591 177	635 851	607 289
Turkeys	56 390	77 642	8 539	9 446
Ducks	4 793	2 591	2 589	2 602
Geese	4 080	7 004	7 133	3 020
TOTAL	1 402 578	1 232 967	1 190 422	1 170 274
ALBERTA				
Cattle & Calves	3 702 125	4 603 056	4 192 887	3 827 143
Pigs	1 995 047	962 505	1 199 397	1 454 824
Sheep & Lambs	244 926	187 403	201 294	179 123
Hens & Chickens	7 923 093	7 697 075	9 190 525	8 852 415
Turkeys	896 301	819 944	903 252	763 485
Ducks	112 167	105 563	129 147	152 051
Geese	78 421	62 145	68 563	100 000
TOTAL	14 952 080	14 437 691	15 885 065	15 329 041
NADC AREA AS % OF ALBERTA				
Cattle & Calves	7.9	9.5	9.5	10.9
Pigs	14.6	9.9	9.4	7.7
Sheep & Lambs	10.4	12.7	12.2	10.7
Hens & Chickens	9.2	7.7	6.9	6.9
Turkeys	6.3	9.5	0.9	1.2
Ducks	4.3	2.5	2.0	1.7
Geese	5.2	11.3	10.4	3.0
TOTAL	9.4	8.5	7.5	7.6

SOURCE:
- Census of Agriculture

NOTE:
- NADC area totals have been calculated from municipal breakdowns published in the source.

TABLE N5

Farm Sales, Capital, Hired Labor, Farm Expenses & Number of Farms

(Dollar values in thousands)

	1971	1976	1981	1986
NADC AREA				
Farm Sales	NA	NA	332 508	493 456
Capital	NA	NA	4 358 155	3 738 206
Hired Labor (weeks)	38 919	49 138	50 802	94 576
Expenses	NA	NA	NA	459 035
Number of Farms	12 254	11 808	12 008	12 089
ALBERTA				
Farm Sales	NA	NA	3 264 822	4 473 871
Capital	NA	NA	36 827 140	28 623 414
Hired Labor (weeks)	522 430	554 534	559 110	867 535
Expenses	NA	NA	NA	3 949 193
Number of Farms	62 702	57 310	58 056	57 777
NADC AREA AS % OF ALBERTA				
Farm Sales	NA	NA	10.2	11.0
Capital	NA	NA	11.8	13.1
Hired Labor (weeks)	7.4	8.9	9.1	10.9
Expenses	NA	NA	NA	11.6
Number of Farms	19.5	20.6	20.7	20.9

SOURCE:
- Census of Agriculture

NOTES:
- NADC area totals have been calculated from municipal breakdowns published in the sources.
- Farm Sales consist of Total Gross sales.
- Capital includes reported market value of land, buildings, machinery, equipment and livestock.
- Expenses include rent, interest, wages, electricity, fuel, machinery, seed, livestock and all other farm-related expenses.
- The number of farms in the NADC area in 1971 is unadjusted and thus does not agree with the number of farms in Table N1.

TABLE N6
Age of Farm Operators

	1971	1976	1981	1986
NADC AREA				
Under 25	379	479	454	343
25–34	2 047	2 100	2 386	2 174
35–44	3 080	3 183	2 997	2 939
45–54	3 434	3 231	3 295	3 186
55–59	1 183	1 155	1 296	1 393
60–64	1 033	793	823	1 089
65–69	657	471	437	508
Over 69	441	396	320	457
TOTAL	12 254	11 808	12 008	12 089
AVERAGE ANNUAL CHANGE (%)		-0.7	0.3	0.1
ALBERTA				
Under 25	1 591	2 058	2 011	1 507
25–34	8 915	9 204	10 419	9 887
35–44	15 088	13 614	13 664	13 247
45–54	17 930	15 711	15 075	13 935
55–59	7 225	6 607	6 568	6 833
60–64	5 684	4 960	5 045	5 637
65–69	3 638	2 832	3 005	3 506
Over 69	2 631	2 324	2 269	3 225
TOTAL	62 702	57 310	58 056	57 777
AVERAGE ANNUAL CHANGE (%)		-1.8	0.3	-0.1
NADC AREA AS % OF ALBERTA				
Under 25	23.8	23.3	22.6	22.8
25–34	23.0	22.8	22.9	22.0
35–44	20.4	23.4	21.9	22.2
45–54	19.2	20.6	21.9	22.9
55–59	16.4	17.5	19.7	20.4
60–64	18.2	16.0	16.3	19.3
65–69	18.1	16.6	14.5	14.5
Over 69	16.8	17.0	14.1	14.2
TOTAL	19.5	20.6	20.7	20.9

SOURCE:
- Census of Agriculture

NOTE:
- NADC area totals have been calculated from municipal breakdowns published in the sources.
- The number of farm operators in the NADC area in 1971 is not adjusted, and thus does not agree with the number of farms in Table N1.

OIL AND GAS

Introduction

The NADC area includes 19 major fields of crude oil production accounting for over 35 percent of the total recoverable crude oil reserves in the province in 1986. By 1987, the NADC area was also producing 6.6% of Alberta's total natural gas through 9 fields. However, the NADC area's share of the provincial marketable natural gas reserves declined to 6% in 1986. All of Alberta's oilsands operations continue to be located in northern Alberta, with Suncor and Syncrude accounting for the total production.

O1 Crude Oil Production by Major Field

Highlights

- 1973 was the peak year for the NADC area, with over 36 million cubic metres of crude oil produced.
- By 1985, production in the NADC area had dropped to almost 16.5 million cubic metres.
- Swan Hills and Rainbow were the two largest producing fields accounting for almost one-third of all production in 1985 in the NADC area.
- The NADC area's proportion of total provincial production peaked in 1976 at just over 47%.

O2 Recoverable Crude Oil Reserves by Major Oil Field

Highlights

- Reserves for the NADC area dropped 60% between 1971 and 1986.
- In 1981, almost 38% of the recoverable reserves were in the Rainbow and Swan Hills fields.
- In 1986, over 35% of the total reserves in the province were in the NADC area, a drop of 12% from 1971 and a drop of 16% from the high of 51% in 1976.

O3 Cumulative Natural Gas Production by Major Field

Highlights

- Gas production came from 9 fields in 1987 in the NADC area, compared to 7 in 1971.
- Production has risen steadily since the early 1970s with an average annual increase of over 12% for the NADC area and almost 9% for the province as a whole.
- Annual increases for the 1980s are well below 10%, with the most recent recorded increase (1986 to 1987) being 5.3% for the NADC area and 5.2% for Alberta.
- The two largest producers as of 1987 were the Kaybob South and Marten Hills fields accounting for over 36% of production in the NADC area. These two fields have been the largest producers since 1981 in the NADC area.

O4 Remaining Marketable Gas Reserves by Major Field

Natural gas reserves have declined significantly in the NADC area from 178.6 billion cubic metres in 1971 to 107.6 billion cubic metres in 1986. A 27 percent increase in the provincial reserves over the same time period has meant that the NADC area's share of the provincial natural gas reserve total has dropped dramatically from 13 percent in 1971 to 6 percent in 1986.

O5 Oilsands Production by Plant

Oilsands output for Alberta has risen 360 percent from 1975 to 1987. Annual changes have fluctuated dramatically with a maximum annual increase of 71 percent in 1979 and a maximum drop of 19 percent in 1984. Both of these large swings were due to changes in production by Syncrude.

Figure 01

Crude Oil and Natural Gas Production in the NADC Area

TABLE O1
Crude Oil Production by Major Field
(Thousands of Cubic Metres)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
NADC AREA															
Carson Creek North	826	1 112	1 494	1 335	1 176	1 065	1 087	1 086	1 307	1 213	1 074	1 190	1 180	958	728
Goose River	302	365	350	318	334	286	299	342	289	283	261	300	240	275	273
Judy Creek	2 813	3 591	5 355	5 022	3 893	3 337	3 284	3 251	3 291	2 901	2 082	1 595	1 256	1 130	955
Kaybob	699	826	938	858	795	636	616	638	814	669	545	501	569	447	406
Kaybob South	397	493	699	747	493	620	576	589	713	654	561	606	592	633	717
Mitsue	2 145	2 463	2 892	2 733	2 813	2 320	2 310	2 294	2 510	2 423	2 226	2 126	1 729	1 591	1 515
Nipisi	1 700	2 352	3 019	3 162	2 463	2 145	2 048	2 120	2 337	1 901	1 947	1 816	1 874	2 380	2 141
Rainbow	3 862	4 672	5 705	5 403	4 640	4 513	4 326	4 204	4 440	4 223	3 702	3 583	3 364	3 122	2 791
Rainbow South	509	461	604	604	509	636	637	576	591	554	408	382	358	395	383
Red Earth	238	254	350	365	318	286	296	269	268	267	237	244	252	250	282
Simonette	254	334	381	493	413	350	342	327	209	168	144	158	132	137	117
Snipe Lake	445	493	509	588	429	445	429	353	317	270	241	224	204	197	206
Sturgeon Lake South	715	906	858	938	969	858	896	854	922	823	718	766	725	742	720
Swan Hills	5 244	6 118	7 485	7 008	6 865	6 150	5 540	4 799	4 377	4 018	3 276	3 182	2 976	2 731	2 616
Swan Hills South	2 272	2 813	2 876	3 178	3 607	3 417	3 212	3 255	3 253	3 218	2 303	1 838	1 489	1 341	1 272
Utikima Lake	NA	NA	NA	NA	NA	NA	224	321	476	NA	NA	NA	NA	NA	NA
Virginia Hills	938	1 224	1 573	1 398	1 224	1 049	966	816	682	728	634	746	713	815	776
Virgo	413	493	572	365	302	222	215	203	202	191	164	190	173	190	192
Zama	652	810	953	731	624	477	453	439	429	375	319	368	391	454	406
TOTAL	24 424	29 780	36 613	35 246	31 867	28 812	27 756	26 736	27 427	24 879	20 842	19 815	18 217	17 788	16 496
ANNUAL CHANGE (%)		21.9	22.9	-3.7	-9.6	-9.6	-3.7	-3.7	2.6	-9.3	-16.2	-4.9	-8.1	-2.4	-7.3
ALBERTA	56 445	67 441	82 983	79 074	67 473	60 863	60 485	59 928	68 517	63 176	56 972	54 382	55 314	59 921	57 238
ANNUAL CHANGE (%)		19.5	23.0	-4.7	-14.7	-9.8	-0.6	-0.9	14.3	-7.8	-9.8	-4.5	1.7	8.3	-4.5
NADC AREA AS % OF ALBERTA	43.3	44.2	44.1	44.6	47.2	47.3	45.9	44.6	40.0	39.4	36.6	36.4	32.9	29.7	28.8

SOURCES:
- Alberta Bureau of Statistics, Industry & Resources, Economic Development & Trade (1980 to 1985)
- Trends (1971-1979)

TABLE O2
Remaining Recoverable Crude Oil Reserves by Major Oil Field
(Thousands of Cubic Metres)

	1971	1976	1981	1986
NADC Area		(As of December 31)		
Carson Creek	20 572	14 396	10 264	5 716
Goose River	6 515	4 847	3 360	2 419
Judy Creek	59 051	42 308	30 776	16 898
Kaybob	14 119	10 215	6 911	4 781
Kaybob South	8 014	8 637	5 617	6 158
Mitsue	47 672	32 796	22 144	19 047
Nipisi	41 946	30 343	21 145	19 662
Rainbow	89 694	67 577	45 386	42 164
Rainbow South	9 723	10 138	8 417	10 201
Red Earth	5 984	4 706	3 852	4 515
Simonette	7 244	5 275	2 515	1 346
Snipe Lake	9 038	6 753	5 291	4 275
Sturgeon Lake South	18 158	13 312	9 048	5 661
Swan Hills	121 754	91 640	69 912	40 072
Swan Hills South	47 829	50 377	35 594	14 707
Utikima Lake	2 409	2 949	4 633	5 403
Virginia Hills	20 404	16 011	9 803	7 462
Virgo	9 357	5 307	3 696	4 289
Zama	15 791	8 614	7 729	7 704
TOTAL	555 274	426 201	306 093	222 480
AVERAGE ANNUAL CHANGE (%)		-5.2	-6.4	-6.2
ALBERTA	1 173 583	831 622	1 249 798	634 739
AVERAGE ANNUAL CHANGE (%)		-6.7	8.5	-12.7
NADC AREA AS % OF ALBERTA	**47.3**	**51.2**	**24.5**	**35.1**

SOURCE:
- ERCB Alberta Crude Oil Reserves

NOTE:
- Totals include heavy crude oil reserves.

TABLE O3
Net Cumulative Natural Gas Production by Major Field
(Millions of Cubic Metres)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
NADC AREA																	
Carson Creek	704	817	873	1 127	1 437	1 747	2 029	2 058	2 247	2 987	3 761	3 929	4 018	4 257	4 511	4 669	4 985
Dunvegan	0	0	902	2 113	3 409	4 790	5 776	6 683	7 806	8 392	9 451	10 527	11 288	11 928	13 007	13 627	14 536
Hotchkiss	0	0	0	0	0	197	394	908	1 452	1 964	2 693	3 167	3 547	3 889	4 410	4 820	5 319
Judy Creek	2 169	2 536	3 240	3 803	4 339	4 677	5 099	5 703	5 570	7 065	7 558	7 969	8 290	8 566	8 827	8 966	9 034
Kaybob	4 761	5 607	6 424	7 156	7 804	8 368	8 790	9 133	9 755	10 159	10 528	11 013	11 509	11 857	12 274	12 348	12 926
Kaybob South	704	1 775	2 620	3 606	4 564	5 409	6 593	7 595	8 453	9 784	10 588	11 518	12 458	13 729	15 144	16 149	17 713
Marten Hills	2 451	3 775	5 015	5 945	7 043	8 283	9 016	10 016	11 019	12 057	12 886	13 461	13 928	14 732	14 856	15 284	15 573
Rainbow	1 042	1 521	2 367	2 367	2 874	3 212	3 775	1 529	1 595	1 773	1 332	2 614	3 588	4 033	4 622	5 151	5 335
Windfall	2 677	3 437	4 029	3 888	3 578	2 902	2 620	2 532	2 970	3 393	3 899	4 358	4 641	4 946	5 667	5 708	5 927
TOTAL	14 508	19 468	25 470	30 005	35 048	39 585	44 092	46 157	50 867	57 574	62 696	68 556	73 267	77 937	83 318	86 722	91 348
ANNUAL CHANGE (%)		34.2	30.8	17.8	16.8	12.9	11.4	4.7	10.2	13.2	8.9	9.3	6.9	6.4	6.9	4.1	5.3
ALBERTA	362 346	414 749	470 703	527 755	584 329	638 958	699 955	738 174	836 377	900 183	968 815	1 029 690	1 095 645	1 163 922	1 236 678	1 306 615	1 374 966
ANNUAL CHANGE (%)		14.5	13.5	12.1	10.7	9.3	9.5	5.5	13.3	7.6	7.6	6.3	6.4	6.2	6.3	5.7	5.2
NADC AREA AS % OF ALBERTA	4.0	4.7	5.4	5.7	6.0	6.2	6.3	6.3	6.1	6.4	6.5	6.7	6.7	6.7	6.7	6.6	6.6

SOURCE:
- ERCB Alberta Crude Oil Reserves

TABLE O4
Remaining Marketable Natural Gas Reserves by Major Gas Field
(Millions of Cubic Metres)

	1971	1976	1981	1986
NADC Area		(As of December 31)		
Carson Creek	6 339	5 663	4 269	3 361
Dunvegan	21 609	26 512	19 808	16 758
Hotchkiss	0	1 155	4 653	3 027
Judy Creek	7 607	6 029	3 364	2 624
Kaybob	11 918	12 228	10 259	9 953
Kaybob South	78 324	72 492	39 259	34 868
Marten Hills	22 314	17 721	13 820	10 325
Rainbow	18 060	12 481	15 278	15 640
Windfall	12 425	11 692	11 430	11 027
TOTAL	178 596	165 973	122 140	107 583
AVERAGE ANNUAL CHANGE (%)		-1.5	-5.9	-2.5
ALBERTA	1 346 914	1 563 910	1 795 288	1 720 087
AVERAGE ANNUAL CHANGE (%)		3.0	2.8	-0.9
NADC AREA AS % OF ALBERTA	13.3	10.6	6.8	6.3

SOURCE:
- ERCB Alberta Crude Oil Reserves

TABLE O5
Oilsands Production by Plant
(Thousands of Tonnes)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
NADC AREA													
Suncor	29 676	32 720	32 020	30 532	29 309	33 150	22 905	27 103	35 860	36 428	30 031	39 010	32 749
Syncrude	0	0	7 583	14 788	48 506	67 924	65 807	66 864	87 541	63 681	96 050	97 344	103 840
TOTAL	29 676	32 720	39 603	45 320	77 815	101 073	88 712	93 967	123 401	100 109	126 081	136 354	136 589
ANNUAL CHANGE (%)		10.3	21.0	14.4	71.7	29.9	-12.2	5.9	31.3	-18.9	25.9	8.1	0.2
ALBERTA	29 676	32 720	39 603	45 320	77 815	101 073	88 712	93 967	123 401	100 109	126 081	136 354	136 589
ANNUAL CHANGE (%)		10.3	21.0	14.4	71.7	29.9	-12.2	5.9	31.3	-18.9	25.9	8.1	0.2
NADC AREA AS % OF ALBERTA	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE:
- Alberta Oil Sands Annual Statistics

FORESTRY

Introduction

The NADC area includes 8 Provincial Forest Zones: Athabasca, Edson, Footner Lake, Grande Prairie, Lac La Biche, Peace River, Slave Lake, and Whitecourt. The Edson and Whitecourt forests extend beyond the NADC area boundary. Forestry activities and timber resources are measured for management purposes by these forest regions or zones.

P1 Forested Areas by Productivity

Highlights for 1988

- The NADC area contains over 86 percent of Alberta's forests.
- 81 percent of the province's productive lands are within the NADC area.
- 94% of Alberta forests that are considered potentially productive are in the NADC area.
- The Footner Lake forest contains the largest forested area in the north, but half of it is non-productive.

P2 Timber Production

1971/72 to 1987/88	% Change
Northern Region	134
Deciduous	1171
Coniferous	116
Alberta	137
Deciduous	1481
Coniferous	115

In 1986/87, 91 percent of the total Alberta timber harvest was harvested in the Northern Region. In 1984/85, only 59 percent of the Alberta harvest was in the Northern Region as the northern harvest dropped 40 percent (over the previous year) due partially to a severe decrease in the timber harvested in the Grande Prairie forest.

P3 Timber Committed by Type

Highlights

- Between 1988 and 1989, three forests committed 100 percent of their coniferous timber: Lac La Biche, Peace River, and Whitecourt.
- Between 1988 and 1989 three forests committed 100 percent of their deciduous timber: Edson, Lac La Biche, and Whitecourt.
- Average timber committed for both coniferous and deciduous woods are similar for both the NADC area and the province, with almost 90% for coniferous and almost 80% for deciduous.

P4 Site Preparation for Reforestation

1976 to 1986	% Change
Alberta	11
NADC Area	6
Whitecourt	395
Peace River	246
Lac La Biche	226
Athabasca	85
Edson	44
Slave Lake	-33
Grande Prairie	-49
Footner Lake	-58

From 1976 to 1986, site preparation for reforestation in the NADC area has represented between 80 and 90 percent of the total site preparation in the province.

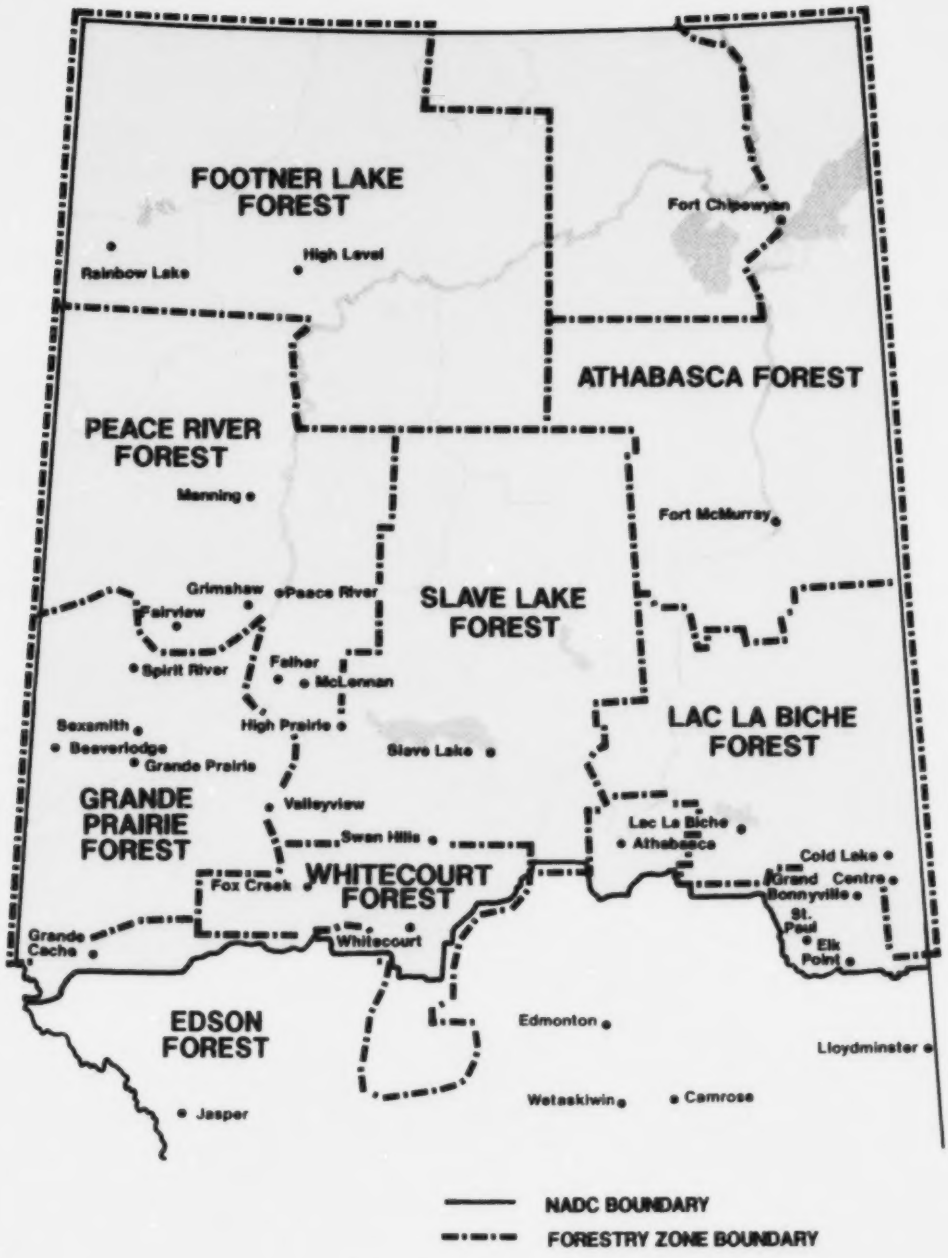


Figure P1

Forestry Zones in the NADC Area

Figure P2

Timber Committed, as % of Total Available

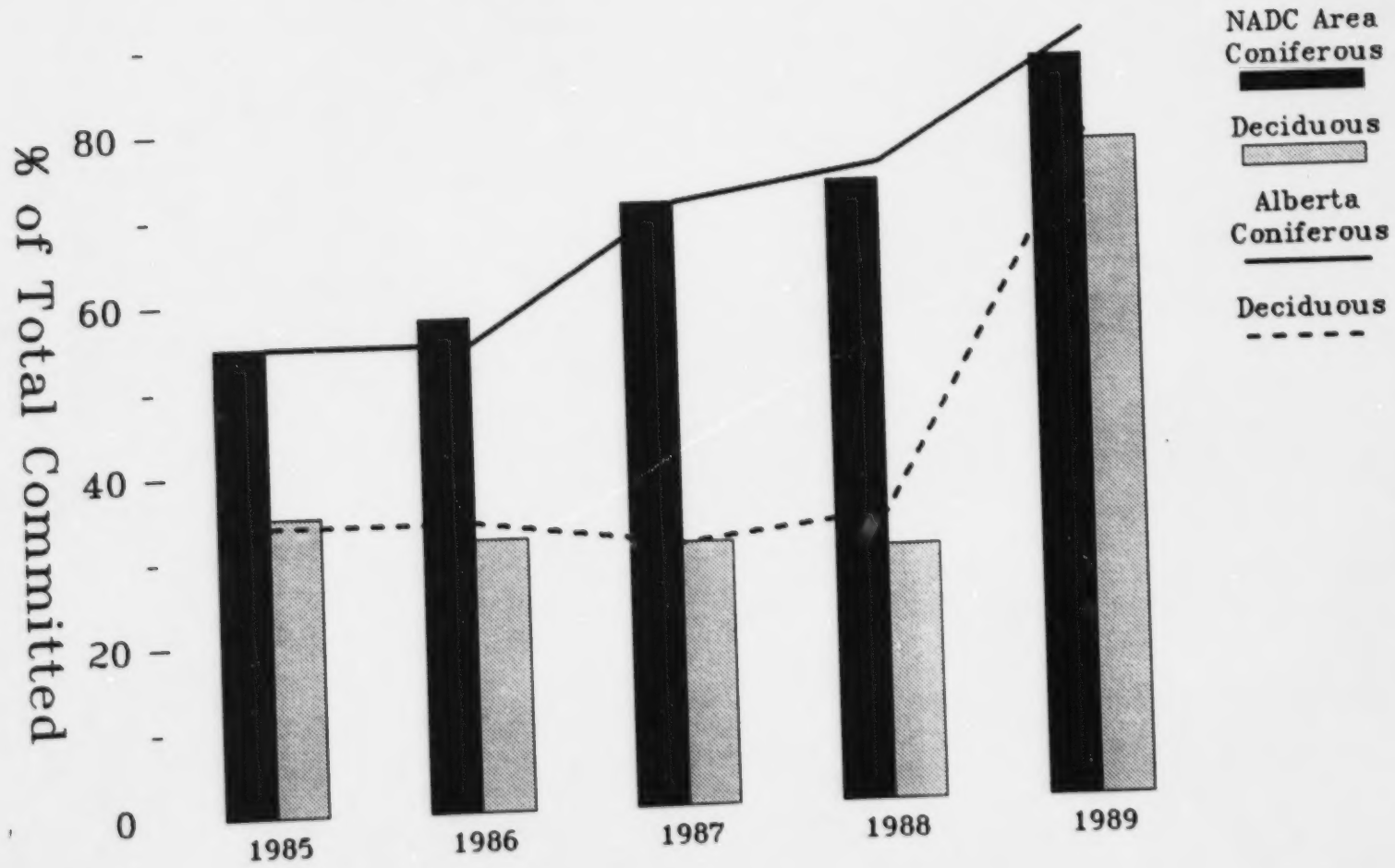


TABLE P1
1988 Forested Area
by Productivity and Forest
(Hectares)

	Productive	Potentially Productive	Non-Productive	Total Area
NADC AREA				
Athabasca	2 176 753	660 902	3 172 291	6 009 946
Edson	240 779	5 962	34 707	281 448
Footner Lake	3 271 934	395 167	3 945 824	7 612 925
Grande Prairie	1 620 516	95 952	221 650	1 938 118
Lac La Biche	1 398 092	128 068	1 423 736	2 949 896
Peace River	1 929 628	242 454	1 205 692	3 377 774
Slave Lake	2 820 143	213 588	1 994 509	5 028 240
Whitecourt	1 151 373	62 465	248 454	1 462 292
TOTAL	14 609 218	1 804 558	12 246 863	28 660 639
ALBERTA	17 978 846	1 926 195	13 287 516	33 192 557
NADC AREA AS % OF ALBERTA	81.3	93.7	92.2	86.3

SOURCE:
- Forestry, Lands, Wildlife, Timber Management

NOTES:
- Totals for the Edson and Whitecourt forests have been adjusted for the NADC area.
- Productive: Land which is capable of yielding at least 50 cubic metres per hectare of gross roundwood volume for all species.
- Potentially Productive: Land which has been disturbed by logging, forest fires, insect/disease attack or wind damage causing windfall. As a result of the disturbance, these areas have reduced tree crown closure to 5% or less. However, these areas are capable of producing a productive forest stand within 120 years.
- Non-Productive: Land not capable of yielding 50 cubic metres per hectare or greater of gross roundwood volume for all species within 120 years.

TABLE P2
Timber Harvested from Provincial Crown Lands by Type and Forest
(Cubic Metres)

	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88
NORTHERN REGION																	
Coniferous																	
Athabasca	61 279	67 813	141 816	9 993	17 122	2 192	2 399	80 317	172 106	111 093	80 346	87 600	108 460	133 704	162 004	159 860	172 863
Edson	817 917	1 260 214	328 904	1 271 416	1 175 824	1 179 172	1 231 026	1 262 418	NA	313 447	626 058	1 014 607	1 233 283	524 363	1 186 991	1 343 798	1 130 306
Footner Lake	328 486	412 739	535 337	206 276	410 503	554 891	411 256	287 469	326 528	362 085	467 011	552 619	737 445	395 898	661 018	703 682	858 038
Grande Prairie	568 616	609 692	666 354	1 049 504	1 228 687	1 061 474	989 622	1 119 121	1 433 915	1 387 934	1 560 448	1 352 367	1 281 637	273 506	1 205 741	1 499 772	1 221 038
Lac La Biche	164 024	134 554	116 658	78 044	135 858	119 396	129 366	142 287	137 209	88 289	74 235	85 999	179 026	210 601	269 626	195 204	267 652
Peace River	300 219	322 379	268 946	128 253	185 171	209 559	275 180	255 495	495 372	360 203	266 736	249 653	481 233	782 497	536 468	688 398	715 473
Slave Lake	460 674	765 830	625 339	615 171	572 303	634 754	714 502	593 979	910 266	612 977	657 356	652 482	805 833	545 712	730 235	962 602	845 645
Whitecourt	370 575	326 555	448 843	311 550	366 255	276 905	605 570	797 259	840 804	667 615	534 483	627 078	1 200 291	630 623	1 083 756	1 246 885	1 410 070
TOTAL	3 071 790	3 899 776	3 132 197	3 670 207	4 091 723	4 038 343	4 358 921	4 538 345	NA	3 903 643	4 266 673	4 622 405	6 027 208	3 496 904	5 835 839	6 800 201	6 621 085
Deciduous																	
Athabasca	0	0	0	0	0	0	0	0	0	0	97	97	889	4 361	5 328	2 526	1 870
Edson	7 932	6 326	8 589	13 275	6 263	5 064	1 164	0	NA	4 081	2 478	25 188	85 938	115 216	246 008	224 146	144 677
Footner Lake	0	0	0	127	0	0	0	0	0	0	0	0	101	1 151	1 110	965	650
Grande Prairie	32	0	0	2 108	0	0	0	0	0	0	0	4 832	116 863	5 841	149 945	80 722	82 937
Lac La Biche	0	140	0	0	0	0	0	0	0	0	0	213	1 399	4 476	3 243	3 282	3 182
Peace River	35	34	0	0	0	2	41	52	55	0	58	0	36	1 247	1 704	1 480	747
Slave Lake	45 602	74 479	47 372	21 941	756	0	0	0	34	72 711	104 528	53 307	135 875	119 090	156 101	178 732	219 117
Whitecourt	620	356	2 170	445	868	129	42	484	9	103	315	440	94 344	132 148	92 348	203 691	235 737
TOTAL	54 221	81 335	58 131	37 896	7 887	5 195	1 247	536	NA	76 895	107 476	84 077	435 445	383 530	655 787	695 544	688 917
TOTAL	3 126 011	3 981 111	3 190 328	3 708 103	4 099 610	4 043 538	4 360 168	4 538 881	NA	3 980 538	4 374 149	4 706 482	6 462 653	3 880 434	6 491 626	7 495 745	7 310 002
ANNUAL CHANGE (%)		27.4	-19.9	16.2	10.6	-1.4	7.8	4.1	NA	NA	9.9	7.6	37.3	-40.0	67.3	15.5	-2.5
ALBERTA																	
Coniferous	3 459 366	4 333 170	5 454 795	3 910 527	4 432 632	4 562 774	4 644 274	4 819 758	NA	4 174 916	4 542 086	4 877 388	6 576 538	6 127 970	6 296 746	7 429 022	7 444 595
Deciduous	56 252	87 867	81 919	55 445	20 024	5 956	1 247	536	NA	89 116	115 140	98 328	450 594	472 301	681 615	800 852	889 304
TOTAL	3 515 618	4 421 037	5 536 714	3 965 972	4 452 656	4 568 730	4 645 521	4 820 294	NA	4 264 032	4 657 226	4 975 716	7 027 132	6 600 271	6 978 361	8 229 874	8 333 899
ANNUAL CHANGE (%)		25.8	25.2	-28.4	12.3	2.6	1.7	3.8	NA	NA	9.2	6.8	41.2	-6.1	5.7	17.9	1.3
NORTHERN REGION AS % OF ALBERTA	**88.9**	**90.0**	**57.6**	**93.5**	**92.1**	**88.5**	**93.9**	**94.2**	**NA**	**93.4**	**93.9**	**94.6**	**92.0**	**58.8**	**93.0**	**91.1**	**87.7**

SOURCE:
- Forestry, Lands, Wildlife, Timber Management

NOTES:
- Production volumes exclude wood chips.
- The Edson and Whitecourt forests lie partially outside the NADC area and have not been adjusted to the NADC boundary.

TABLE P3
Timber Committed by Type and Region
(Percent of Total Available)

	1985	1986	1987	1988	1989
NADC AREA					
Coniferous					
Athabasca	12	12	13	13	36
Edson	2	94	93	100	100
Footner Lake	35	35	63	65	75
Grande Prairie	100	100	100	100	100
Lac La Biche	18	18	47	56	100
Peace River	88	88	80	78	100
Slave Lake	50	61	76	83	89
Whitecourt	75	57	83	81	100
TOTAL	55	58	71	73	87
Deciduous					
Athabasca	0	0	0	0	52
Edson	11	11	10	10	100
Footner Lake	0	0	0	0	34
Grande Prairie	87	86	93	93	81
Lac La Biche	0	0	0	2	100
Peace River	44	44	45	45	96
Slave Lake	34	34	16	16	91
Whitecourt	43	14	71	71	100
TOTAL	35	32	31	30	77
ALBERTA					
Coniferous	55	55	71	75	90
Deciduous	34	34	31	34	78
NADC AREA AS % OF ALBERTA					
Coniferous	100.0	105.5	100.0	97.3	96.7
Deciduous	102.9	94.1	100.0	88.2	98.7

SOURCE:
- Forestry, Lands, Wildlife, Timber Management

NOTES:
- Totals for the Edson and Whitecourt forests have been adjusted for the NADC area.
- Totals for the NADC area represent the total committed proportion of the Provincial Annual Allowable Cut.
- 1989 totals include timber committed to all existing and proposed forestry projects as of March 31, 1989.

TABLE P4
Site Preparation for Reforestation by Region
(Hectares)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
NADC AREA											
Athabasca	268	519	0	23	624	276	284	0	518	609	496
Edson	3 742	3 186	2 643	1 548	4 244	2 848	3 602	3 870	3 687	5 909	5 384
Footner Lake	1 718	1 611	2 222	4 274	343	256	669	2 369	2 216	463	719
Grande Prairie	6 451	4 553	4 818	2 515	2 910	1 639	1 575	2 209	3 592	2 412	3 308
Lac La Biche	252	371	622	1 663	539	92	0	696	326	263	821
Peace River	284	135	1 117	3 253	1 248	1 148	652	203	46	470	984
Slave Lake	2 672	1 420	1 988	4 248	1 298	3 279	5 262	2 426	2 910	2 305	1 802
Whitecourt	699	1 003	1 832	5 361	994	652	2 063	2 971	3 994	3 869	3 458
TOTAL	16 087	12 797	15 242	22 885	12 200	10 190	14 107	14 744	17 289	16 300	16 972
ANNUAL CHANGE (%)		-20.5	19.1	50.1	-46.7	-16.5	38.4	4.5	17.3	-5.7	4.1
ALBERTA	17 545	14 612	16 976	24 895	14 078	12 585	16 564	16 611	19 607	18 082	19 404
ANNUAL CHANGE (%)		-16.7	16.2	46.6	-43.5	-10.6	31.6	0.3	18.0	-7.8	7.3
NADC AREA AS % OF ALBERTA	91.7	87.6	89.8	91.9	86.7	81.0	85.2	88.8	88.2	90.1	87.5

SOURCE:
- Alberta Forestry Service: Reforestation Branch

NOTES:
- Statistics for each year calculated from April 1 of the previous year to March 31 of the listed year.
- Totals for the Edson and Whitecourt forests have been adjusted for the NADC area.
- Site preparation statistics cited for green-harvested areas only.
- Totals have been rounded independently and may not add.

FISHING, TRAPPING AND WILDLIFE

Introduction

The NADC area provides a significant proportion of the game animals, the commercial fisheries and lakes, and the fur-bearing animals for Alberta. Northern Alberta trappers capture approximately 80% to 90% of the total annual fur harvest in the Province.

Q1 Commercial Fisheries

Highlights of Changes, 1975 to 1988 (%)

	Alberta	Northern Region
Value	145	153
Fishermen	181	125
Lakes Fished	40	44

While less than half (42%) of the province's fisherman resided in northern Alberta in 1988, 77% of total catch value and 79% of the lakes fished were in this area. During the same year, 74% of the total provincial catch occurred in northern Alberta, only the second year since 1975 that this figure dropped below 75 percent.

Q2 Number of Fur-Bearing Animals Harvested

Highlights

- 1980 was a peak year in the Northern Region, with 644,047 animals harvested, a 185% increase over the previous year.
- In 1982, northern trappers' harvests accounted for 145,481 animals, while the provincial total was 176,606, the lowest counts in the past 11 years for both.
- The northern percentage of total Alberta harvest has ranged from 81 to 93 percent over the past 11 years.

Q3 Value to Trappers of Fur-bearing Animals Harvested

The value to trappers is derived by multiplying the numbers of animals harvested by average annual prices for each. The prices change year by year and are reported in current dollars. The value totals are more heavily affected by high-value animals such as lynx and mink.

Highlights

- The peak year for Northern Alberta was 1980 with a total value of $6.3 million, while the lowest year was 1978 with a total value of $1.9 million.
- The animal that generated the most value for trappers in northern Alberta in 1988 was the marten with a total of $1,291,380. From 1978 to 1983, lynx generated the most value.
- Northern Alberta's total value accrued from the annual fur harvest has remained high relative to the Alberta total but has dropped from a peak of 95% in 1984 to 84% in 1988.

Q4 Estimated Game Animal Populations

Data on game animal populations are relatively incomplete, particularly for the Northern Region. For those animals for which data exist, the table shows that in the northern Region only the sharp-tailed grouse decreased in population from 1985 to 1986 (5 percent).

A high proportion of several of the province's game animals are found in the Northern Region. Approximately 60 percent of Alberta moose, 75 percent of fall black bears, 55 percent of ruffed grouse and 50 percent of spruce grouse were located in the Northern Region in 1986.

Figure Q1

Total Commercial Fish Catch and Value

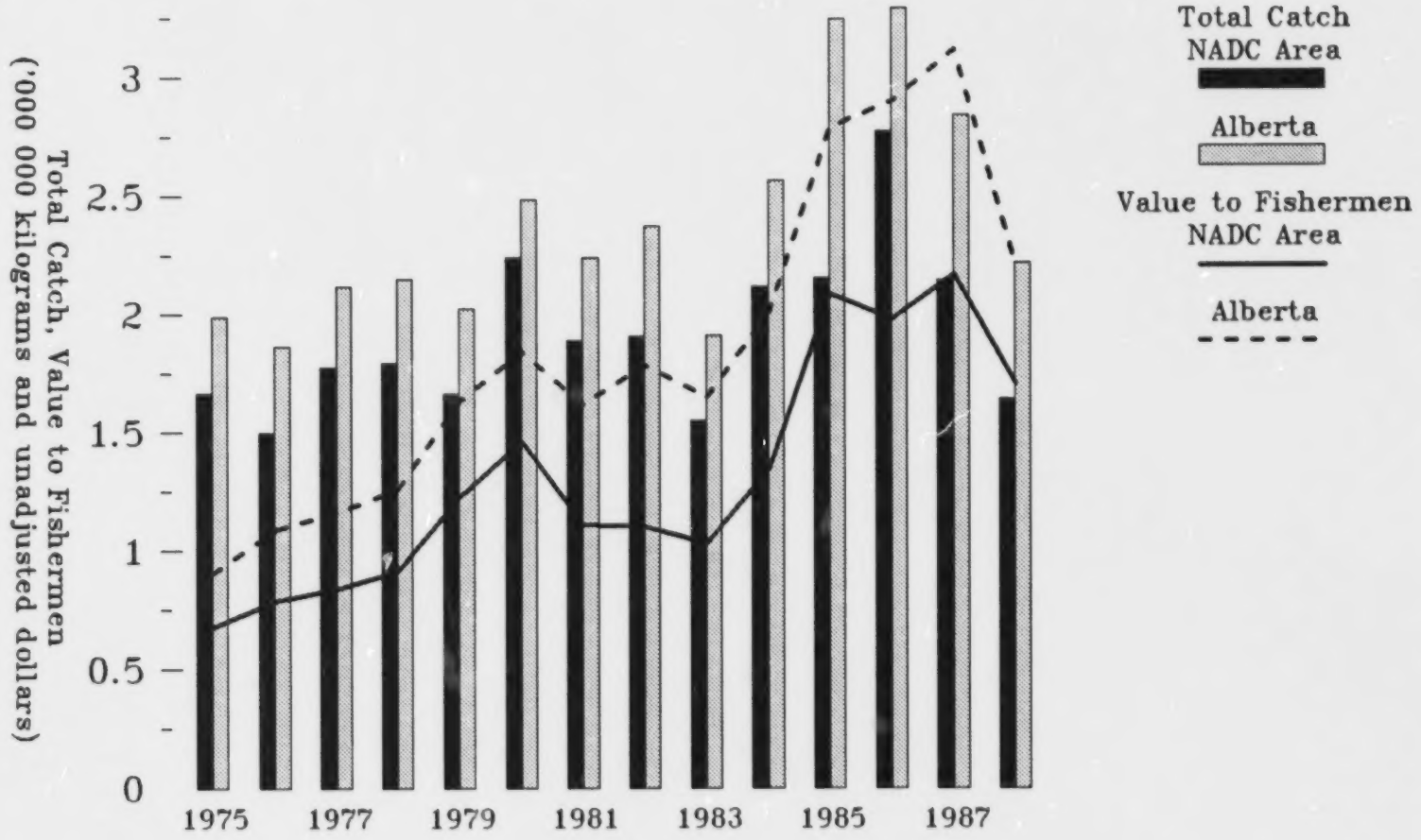


TABLE Q1
Commercial Fisheries Catch Volumes and Values
(Thousands of Kilograms, Unadjusted Dollars)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NORTHERN REGION														
Value to Fishermen	679 407	791 586	844 062	918 452	1 231 806	1 469 215	1 114 963	1 108 404	1 037 666	1 354 944	2 097 497	1 989 880	2 180 556	1 718 074
Number of Fishermen	681	762	802	872	1 022	1 729	1 513	1 508	1 089	1 219	2 062	1 844	2 798	1 529
Number of Lakes Fished	62	66	62	59	60	59	62	59	54	69	84	77	87	89
Total Catch	1 669	1 503	1 780	1 798	1 668	2 245	1 894	1 912	1 557	2 124	2 163	2 785	2 155	1 648
ANNUAL CHANGE (%)														
Value to Fishermen		16.5	6.6	8.8	34.1	19.3	-24.1	-0.6	-6.4	30.6	54.8	-5.1	9.6	-21.2
Number of Fishermen		11.9	5.2	8.7	17.2	69.2	-12.5	-0.3	-27.8	11.9	69.2	-10.6	51.7	-45.4
Number of Lakes Fished		6.5	-6.1	-4.8	1.7	-1.7	5.1	-4.8	-8.5	27.8	21.7	-8.3	13.0	2.3
Total Catch		-9.9	18.4	1.0	-7.2	34.6	-15.6	1.0	-18.6	36.4	1.8	28.8	-22.6	-23.5
ALBERTA														
Value to Fishermen	907 702	1 094 633	1 166 507	1 265 941	1 637 722	1 850 440	1 627 798	1 791 011	1 658 406	2 019 873	2 800 228	2 913 556	3 130 836	2 222 585
Number of Fishermen	1 279	1 551	1 761	2 065	2 299	3 168	2 563	3 346	2 903	2 891	3 596	3 794	4 603	3 595
Number of Lakes Fished	80	83	75	75	76	78	78	80	71	91	103	104	114	112
Total Catch	1 990	1 869	2 123	2 156	2 027	2 492	2 245	2 380	1 916	2 576	3 257	3 337	2 853	2 226
ANNUAL CHANGE (%)														
Value to Fishermen		20.6	6.6	8.5	29.4	13.0	-12.0	10.0	-7.4	21.8	38.6	4.0	7.5	-29.0
Number of Fishermen		21.3	13.5	17.3	11.3	37.8	-19.1	30.6	-13.2	-0.4	24.4	5.5	21.3	-21.9
Number of Lakes Fished		3.8	-9.6	0.0	1.3	2.6	0.0	2.6	-11.3	28.2	13.2	1.0	9.6	-1.8
Total Catch		-6.1	13.6	1.6	-6.0	22.9	-9.9	6.0	-19.5	34.4	26.4	2.5	-14.5	-22.0
NORTHERN REGION AS % OF ALBERTA														
Value to Fishermen	74.8	72.3	72.4	72.6	75.2	79.4	68.5	61.9	62.6	67.1	74.9	68.3	69.6	77.3
Number of Fishermen	53.2	49.1	45.5	42.2	44.5	54.6	59.0	45.1	37.5	42.2	57.3	48.6	60.8	42.5
Number of Lakes Fished	77.5	79.5	82.7	78.7	78.9	75.6	79.5	73.8	76.1	75.8	81.6	74.0	76.3	79.5
Total Catch	83.9	80.4	85.8	83.4	82.3	90.1	84.4	80.3	81.3	82.5	66.4	83.5	75.5	74.0

SOURCE:
- Forestry, Lands & Wildlife, Fisheries Management

NOTE:
- Northern Region is defined as commercial fishing zones C to H.

TABLE Q2
Number of Fur-bearing Animals Harvested by Registered Trappers by Species

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NORTHERN REGION											
Badger	5	9	18	14	7	7	10	11	4	44	27
Black Bear	82	121	161	201	68	145	159	73	102	86	61
Grizzly Bear	0	7	0	0	1	0	0	0	4	0	0
Beaver	21 093	28 880	42 334	40 598	25 954	23 823	26 314	23 848	32 086	45 823	31 126
Bobcat	0	0	12	8	12	4	0	9	1	0	4
Cougar	0	0	10	0	2	6	0	0	0	0	0
Coyote	1 709	2 530	3 077	3 220	4 343	7 825	4 838	3 867	3 063	4 149	3 517
Weasel	8 943	9 783	20 441	13 285	4 161	4 515	9 126	10 452	6 009	13 573	18 989
Fisher	996	1 145	2 217	2 379	3 270	4 043	2 622	2 014	1 750	1 680	1 205
Silver Fox	12	33	76	70	126	86	35	46	37	34	37
Cross Fox	88	185	378	405	615	476	202	289	121	185	215
Blue Fox	1	1	14	2	5	1	31	0	0	0	1
Red Fox	173	381	795	690	890	730	374	479	240	392	545
White Fox	1	1	23	8	2	1	0	1	1	2	0
Lynx	2 407	6 115	9 052	10 134	9 990	5 975	1 969	835	615	606	296
Marten	2 086	3 373	4 776	4 523	4 782	7 103	4 332	12 294	7 054	12 348	12 258
Mink	6 249	10 299	17 078	11 062	7 505	5 350	2 002	1 365	1 812	3 704	6 225
Muskrat	70 730	45 659	56 488	62 626	24 269	15 382	23 940	25 210	41 194	51 223	55 563
Otter	156	277	345	273	251	242	208	219	268	330	292
Rabbit	0	0	9	0	0	1	0	0	0	0	0
Raccoon	2	30	0	1	0	1	0	1	1	1	16
Skunk	14	7	49	58	34	679	56	35	135	32	0
Squirrel	101 970	116 577	477 701	247 462	58 933	107 064	245 124	97 844	83 046	123 521	118 419
Timber Wolf	137	201	352	224	213	320	216	157	227	230	149
Wolverine	34	28	57	43	48	136	80	60	62	48	38
Other	9	1	8 584	6	0	4 047	146	1	0	0	0
TOTAL	216 897	225 643	644 047	397 292	145 481	187 962	321 784	179 110	177 832	258 011	248 983
ANNUAL CHANGE (%)		4.0	185.4	-38.3	-63.4	29.2	71.2	-44.3	-0.7	45.1	-3.5

TABLE Q2
Number of Fur-bearing Animals Harvested by Registered Trappers by Species

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
ALBERTA											
Badger	16	36	58	53	37	34	36	27	21	49	36
Black Bear	116	148	192	219	80	170	180	84	109	96	69
Grizzly Bear	0	7	0	0	1	0	0	0	21	0	0
Beaver	25 963	34 522	54 696	51 092	33 246	30 950	31 898	29 339	38 066	53 502	37 093
Bobcat	0	2	13	13	23	16	2	530	3	5	11
Cougar	0	0	11	0	2	6	0	0	0	0	0
Coyote	2 742	4 118	4 749	4 645	6 183	10 558	6 441	5 648	4 473	5 840	5 350
Weasel	10 572	11 206	17 515	17 261	5 239	5 717	9 847	12 117	6 851	14 350	20 279
Fisher	1 093	1 247	2 447	2 639	3 402	4 287	2 761	2 101	1 809	1 721	1 242
Silver Fox	14	34	85	78	129	90	37	46	37	36	37
Cross Fox	96	190	411	443	647	497	215	294	128	193	231
Blue Fox	1	1	14	2	6	1	1	0	0	0	1
Red Fox	189	384	902	751	926	784	411	519	265	424	584
White Fox	1	2	24	10	2	1	0	1	1	2	0
Lynx	2 660	6 435	10 002	10 953	10 861	7 421	2 404	1 107	730	694	306
Marten	2 860	4 389	6 994	6 378	5 736	8 551	5 586	14 342	8 379	13 898	16 168
Mink	6 892	11 181	19 321	12 576	8 967	6 342	2 303	1 562	1 960	3 927	6 508
Muskrat	80 123	51 968	67 730	75 707	31 649	19 622	25 949	27 019	43 878	55 931	61 337
Otter	166	282	383	294	252	249	210	221	268	335	298
Rabbit	0	0	9	0	6	1	0	0	0	0	0
Raccoon	2	62	2	1	4	1	2	3	1	5	17
Skunk	14	26	49	72	49	691	63	51	135	38	0
Squirrel	120 545	137 925	496 651	291 605	68 859	129 071	257 591	99 168	95 303	137 678	126 595
Timber Wolf	157	235	391	280	246	399	258	210	255	274	200
Wolverine	34	33	62	52	54	152	90	68	67	51	42
Other	11	1	11 145	6	0	5 540	146	1	0	0	0
TOTAL	254 267	264 434	693 856	475 130	176 606	231 151	346 431	194 458	202 760	289 049	276 404
ANNUAL CHANGE (%)		4.0	162.4	-31.5	-62.8	30.9	49.9	-43.9	4.3	42.6	-4.4
NORTHERN REGION AS % OF ALBERTA	**85.3**	**85.3**	**92.8**	**83.6**	**82.4**	**81.3**	**92.9**	**92.1**	**87.7**	**89.3**	**90.1**

SOURCE:
- Alberta Fish & Wildlife

NOTE:
- Northern Region is defined as Fish & Wildlife Districts 1, 4, 12, 17, 19, 20, 21, 22, 23, 25, 26, 29, 31, 36, 42, 43, 48, 53, 58, 59 and 62.

TABLE Q3

Total Value to Registered Trappers of Fur-bearing Animals Harvested by Species

(Current Dollars)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NORTHERN REGION											
Badger	268	710	729	761	217	264	371	240	84	706	493
Black Bear	3 760	5 869	10 433	NA	3 046	8 452	8 510	4 096	4 520	4 403	3 246
Grizzly Bear	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beaver	381 783	927 048	1 689 127	1 171 252	544 515	419 047	852 704	614 086	1 020 335	1 740 358	767 878
Bobcat	0	0	1 476	NA	2 019	877	0	2 103	344	0	1 015
Cougar	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Coyote	98 951	241 615	204 621	251 546	302 229	458 780	232 466	237 395	197 931	294 786	140 574
Weasel	15 203	18 588	34 750	18 200	5 576	9 662	21 355	26 339	18 327	31 897	47 852
Fisher	83 166	142 209	278 012	302 775	443 903	511 682	335 616	526 195	365 593	389 340	192 101
Silver Fox	745	3 713	6 870	5 671	8 545	3 841	2 400	1 480	891	1 440	1 133
Cross Fox	8 136	31 367	32 395	43 874	54 015	41 736	18 487	29 443	6 822	11 637	9 933
Blue Fox	NA	NA	NA	97	NA	NA	NA	0	NA	NA	14
Red Fox	10 934	45 625	54 458	51 122	51 762	32 149	16 909	17 761	7 740	11 862	12 987
White Fox	NA	NA	NA	314	73	30	0	25	NA	30	0
Lynx	677 691	1 904 517	2 058 425	3 102 524	2 843 254	1 673 956	683 775	499 555	405 008	306 757	116 251
Marten	48 187	125 476	161 906	168 844	175 547	296 692	214 001	675 432	410 331	1 273 820	1 291 380
Mink	128 729	287 857	560 158	373 343	238 659	139 742	52 953	42 834	69 273	178 348	282 740
Muskrat	293 530	239 710	372 821	363 231	77 418	39 070	77 805	70 840	120 698	197 209	211 139
Otter	8 861	24 030	21 977	12 725	10 442	10 844	7 746	8 878	10 071	12 883	9 067
Rabbit	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Raccoon	66	1 260	0	39	0	22	0	21	26	25	286
Skunk	21	53	255	319	215	3 395	224	70	NA	0	0
Squirrel	158 054	268 127	812 092	390 990	89 578	143 466	254 929	209 285	73 080	86 465	149 641
Timber Wolf	12 234	24 984	28 266	NA	18 797	30 598	16 956	12 571	18 012	18 117	12 443
Wolverine	5 234	5 148	6 373	7 319	8 870	23 762	15 391	13 548	12 939	8 588	6 119
Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL	1 935 551	4 297 903	6 335 141	6 264 946	4 878 681	3 848 067	2 812 596	2 992 198	2 742 026	4 568 669	3 256 293
ANNUAL CHANGE (%)		122.1	47.4	-1.1	-22.1	-21.1	-26.9	6.4	-8.4	66.6	-28.7

TABLE Q3
Total Value to Registered Trappers of Fur-bearing Animals Harvested by Species
(Current Dollars)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
ALBERTA											
Badger	858	2 839	2 349	2 882	1 147	1 284	1 335	588	439	786	657
Black Bear	5 319	7 178	12 442	NA	3 584	9 909	9 634	4 713	4 830	4 915	3 671
Grizzly Bear	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beaver	469 930	1 108 156	2 182 370	1 474 004	697 501	544 411	661 565	755 479	1 210 499	2 032 006	915 084
Bobcat	0	629	1 599	NA	3 869	3 508	410	123 845	1 032	1 457	2 790
Cougar	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Coyote	158 762	393 269	315 809	362 867	430 275	619 016	309 490	346 731	289 045	414 932	213 840
Weasel	17 972	21 291	29 776	23 648	7 020	12 234	23 042	30 535	20 896	33 723	51 103
Fisher	91 266	154 877	306 854	335 866	461 822	542 563	353 408	392 173	377 918	398 842	198 000
Silver Fox	869	3 825	7 684	6 319	8 749	4 019	2 537	1 480	891	1 524	1 133
Cross Fox	8 875	32 215	35 223	47 990	56 826	43 577	19 677	29 953	7 217	12 140	10 672
Blue Fox	NA	NA	NA	97	NA	NA	NA	NA	NA	NA	14
Red Fox	11 945	45 984	61 787	55 642	53 856	34 527	18 581	19 245	8 546	12 830	13 917
White Fox	NA	NA	NA	392	73	30	0	25		30	0
Lynx	748 923	2 004 181	2 274 455	3 353 261	3 091 149	2 079 067	834 837	662 285	480 742	351 303	120 178
Marten	66 066	163 271	237 097	238 091	210 569	357 175	275 948	787 949	487 406	1 433 718	1 703 299
Mink	141 975	312 509	633 729	424 440	2 829 151	165 653	60 914	49 016	74 931	189 085	295 593
Muskrat	332 510	272 832	447 018	439 101	100 960	49 840	84 334	75 923	128 563	215 334	233 081
Otter	9 429	24 464	24 397	13 703	10 483	11 158	7 820	8 959	10 071	13 078	9 253
Rabbit	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Raccoon	66	2 604	78	39	127	22	37	62	26	123	304
Skunk	21	196	255	396	310	3 455	252	102	NA	0	0
Squirrel	186 845	317 228	844 307	460 736	104 666	172 955	267 895	93 218	83 867	96 375	100 010
Timber Wolf	14 020	29 211	31 397	NA	21 710	38 152	20 253	16 815	20 234	21 583	16 702
Wolverine	5 234	6 067	6 932	8 851	9 979	26 557	17 315	15 354	13 982	9 125	6 763
Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL	2 270 885	4 902 824	7 455 555	7 248 324	8 103 824	4 719 114	2 969 284	3 414 451	3 221 135	5 242 909	3 896 065
ANNUAL CHANGE (%)		115.9	52.1	-2.8	11.8	-41.8	-37.1	15.0	-5.7	62.8	-25.7
NORTHERN REGION AS % OF ALBERTA	85.2	87.7	85.0	86.4	60.2	81.5	94.7	87.6	85.1	87.1	83.6

SOURCE:
- Alberta Fish & Wildlife

NOTES:
- Values are expressed in current dollars, based on average price.
- Northern Region is defined as Fish & Wildlife Districts 1, 4, 12, 17, 19, 20, 21, 22, 23, 25, 26, 29, 31, 36, 42, 43, 48, 53, 58, 59 and 62.
- Totals are rounded independently and may not add.

TABLE Q4
Estimated Game Animal Population

	1983	1984	1985	1986
NORTHERN REGION				
Ducks	NA	NA	NA	NA
Geese	NA	NA	NA	NA
Pheasant	1 000	1 850	2 700	3 400
Gray Hungarian Partridge	16 000	12 000	8 000	9 210
Sharp-tailed Grouse	150 000	131 250	112 500	106 875
Ruffed Grouse	550 000	962 500	1 375 000	1 917 300
Spruce Grouse	NA	NA	250 000	250 000
Blue Grouse	NA	NA	360	360
Sage Grouse	NA	NA	NA	NA
Ptarmigan	NA	NA	NA	NA
Moose	NA	57 560	50 440	62 760
Elk	NA	1 480	1 480	1 850
White-tailed Deer	NA	26 540	28 200	33 600
Mule Deer	NA	13 140	13 250	13 250
Antelope	NA	NA	NA	NA
Bighorn Sheep	NA	NA	NA	NA
Mountain Goat	NA	NA	NA	NA
Grizzly Bear	NA	NA	NA	350
Fall Black Bear	NA	NA	NA	37 500
Cougar	NA	NA	NA	100
ALBERTA				
Ducks	1 250 000	4 475 000	7 700 000	7 500 000
Geese	700 000	700 000	700 000	700 000
Pheasant	343 000	655 500	968 000	106 480
Gray Hungarian Partridge	600 000	450 000	300 000	345 000
Sharp-tailed Grouse	503 000	440 125	377 250	358 400
Ruffed Grouse	1 005 000	1 757 500	2 510 000	3 500 000
Spruce Grouse	NA	NA	500 000	500 000
Blue Grouse	NA	NA	9 000	9 000
Sage Grouse	NA	NA	3 500	3 500
Ptarmigan	NA	NA	10 000	10 000
Moose	NA	93 880	86 810	106 140
Elk	NA	15 640	15 640	17 000
White-tailed Deer	NA	121 830	127 550	127 000
Mule Deer	NA	87 320	77 670	81 300
Antelope	NA	29 050	21 160	22 800
Bighorn Sheep	NA	5 870	5 870	5 870
Mountain Goat	NA	393	345	587
Grizzly Bear	NA	NA	NA	1 000
Fall Black Bear	NA	NA	50 000	50 000
Cougar	NA	NA	NA	650

TABLE Q4
Estimated Game Animal Population

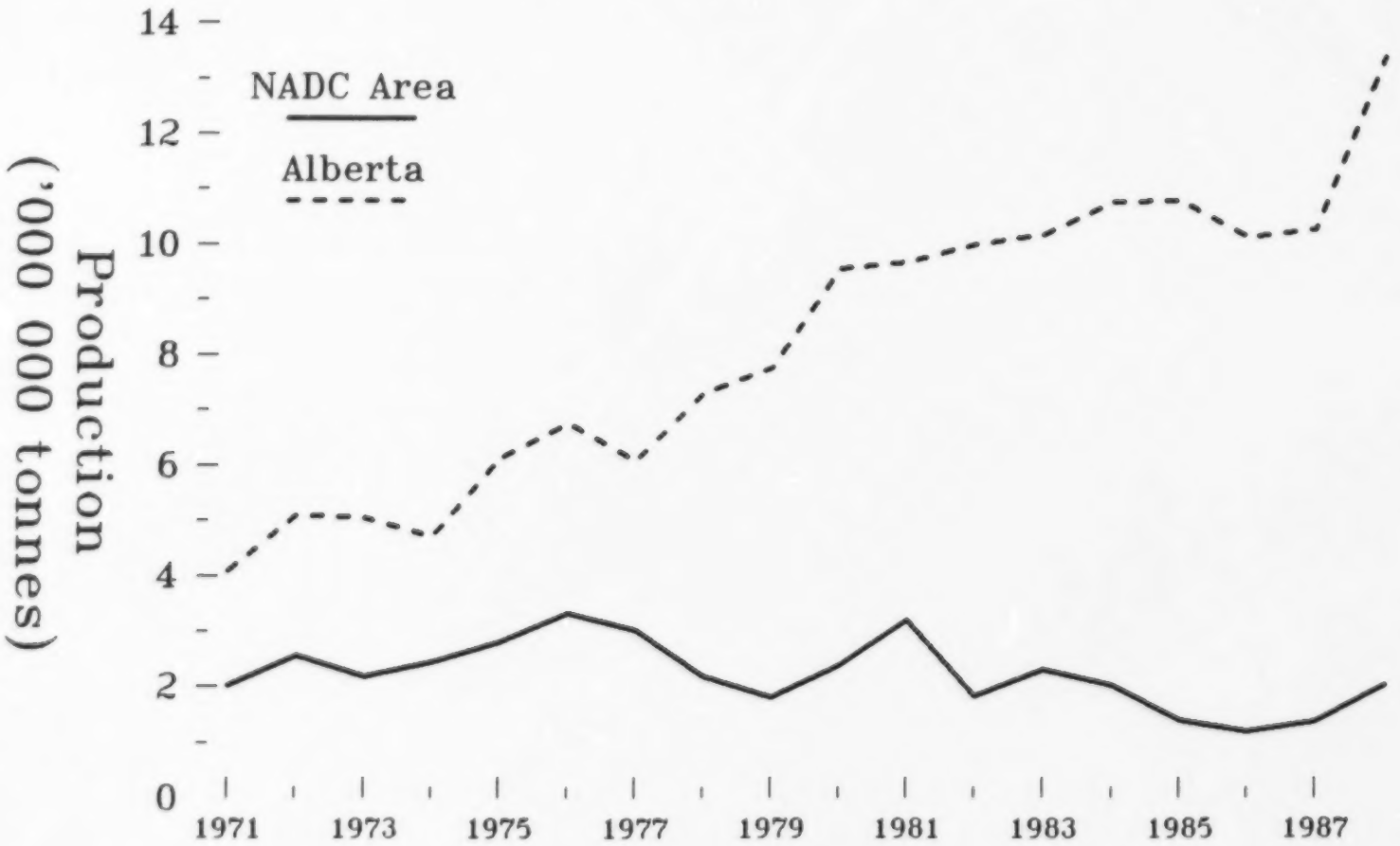
	1983	1984	1985	1986
NORTHERN REGION AS % OF ALBERTA				
Ducks	NA	NA	NA	NA
Geese	NA	NA	NA	NA
Pheasant	0.3	0.3	0.3	3.2
Gray Hungarian Partridge	2.7	2.7	2.7	2.7
Sharp-tailed Grouse	29.8	29.8	29.8	29.8
Ruffed Grouse	54.7	54.8	54.8	54.8
Spruce Grouse	NA	NA	50.0	50.0
Blue Grouse	NA	NA	4.0	4.0
Sage Grouse	NA	NA	NA	NA
Ptarmigan	NA	NA	NA	NA
Moose	NA	61.3	58.1	59.1
Elk	NA	9.5	9.5	10.9
White-tailed Deer	NA	21.8	22.1	26.5
Mule Deer	NA	15.0	17.1	16.3
Antelope	NA	NA	NA	NA
Bighorn Sheep	NA	NA	NA	NA
Mountain Goat	NA	NA	NA	NA
Grizzly Bear	NA	NA	NA	35.0
Fall Black Bear	NA	NA	NA	75.0
Cougar	NA	NA	NA	15.4

SOURCE:
- Wildlife Management Department

NOTES:
- Northern Region is defined as Game Bird Zones 1 and 2 and Big Game Zones 1, 2, 3, 14 and 16.
- Pheasant data indicate hatch-reared birds released annually.
- Partridge and Grouse data are rough estimates, using expected densities extrapolated over large areas.
- Estimates for ungulates (deer, moose, elk) often change, due to improvements in methodology or available data.

Figure R1

Bituminous Coal Production



MINING

Introduction

Coal production in the NADC area once accounted for half of the province's total output. However, since the mid-1970s, the production of the Smoky River Mine (the lone mine in the NADC area) has dropped as a percentage of total provincial production. In 1988, only 15% of all Alberta bituminous coal production took place in the NADC area.

R1 Bituminous Coal Production

Changes in Production to 1988

- A 27% increase in 1972 over 1971 for Smoky River.
- Total production of both underground and surface operations at Smoky River peaked in 1976 and again in 1981.
- By 1988, production increased 48% over the previous year but remained at 2 035 000 tonnes, almost equivalent to the mine's output in 1971.
- Alberta's production has continued to increase since 1974, with the only drops occurring in 1977 and 1986.
- Alberta's production increased 30% from 1987 to 1988.

TABLE R1
Bituminous Coal Production
(Thousands of Tonnes)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NADC AREA																		
Smoky River Coal Ltd. (1980)																		
Underground	1 654	1 502	847	773	803	1 132	1 296	1 264	1 132	1 082	965	866	745	586	494	434	643	821
Surface	371	1 068	1 345	1 676	2 004	2 192	1 721	913	677	1 306	2 240	962	1 561	1 443	897	770	733	1 214
TOTAL	2 025	2 570	2 192	2 449	2 807	3 324	3 017	2 177	1 809	2 388	3 205	1 828	2 306	2 029	1 391	1 204	1 376	2 035
ANNUAL CHANGE (%)		26.9	-14.7	11.7	14.6	18.4	-9.2	-27.9	-16.9	32.0	34.2	-43.0	26.1	-12.0	-31.5	-13.4	14.3	47.8
ALBERTA	4 088	5 108	5 033	4 694	6 108	6 752	6 072	7 308	7 763	9 552	9 680	9 985	10 174	10 774	10 794	10 136	10 278	13 380
ANNUAL CHANGE (%)		25.0	-1.5	-6.7	30.1	10.5	-10.1	20.4	6.2	23.0	1.3	3.1	1.9	5.9	0.2	-6.1	1.4	30.2
NADC AREA AS % OF ALBERTA	49.5	50.3	43.5	52.2	46.0	49.2	49.7	29.8	23.3	25.0	33.1	18.3	22.7	18.8	12.9	11.9	13.4	15.2

SOURCE:
- Alberta Coal Industry Annual Statistics

TOURISM, CULTURE, RECREATION AND PARKS

Introduction

The NADC area comprises five of Alberta's Tourism Zones: Evergreen, Game Country, Lakeland, Midnight Twilight and the Mighty Peace. All the zones except for Game Country and Mighty Peace cross the NADC boundary on the south end. The total visitation to these northern zones has remained relatively stable between 1982 and 1988, similar to tourist travel for the entire province. The Lakeland Zone dominated visitation for the north, with 37 percent (or 1,172,000) of total person trips to the area in 1988; however, growth between 1982 and 1988 was the greatest for Midnight Twilight.

S1 Estimated Tourist Visitation by Zone

Increase in visitation from 1982 to 1988

Area/Zone	%
Alberta	6.8
NADC area	5.9
Midnight Twilight	6.7
Lakeland	6.1
Game Country	5.8
Evergreen	5.5
Mighty Peace	4.9

The northern region of the province has continued to capture virtually the same proportion (almost 19 percent) of visitation to Alberta since 1982.

S2 Fixed-roof Accommodation by Zone

The number of establishments, available room nights and occupancy rates has varied between 1983 and 1987.

Area/Zone	Difference (83-87)
Establishments	No.
Alberta	-3
Northern Region	-4
Evergreen	3
Game County	0
Midnight Twilight	-1
Mighty Peace	-2
Lakeland	-4
Room Nights	
Alberta	1976
Northern Region	159
Evergreen	177
Midnight Twilight	61
Mighty Peace	50
Lakeland	-64
Game Country	-65
Occupancy	%
Alberta	6.8
Northern Region	7.6
Game Country	19.5
Midnight Twilight	11.1
Might Peace	6.1
Lakeland	4.2
Evergreen	-3.1

In 1987, the five Northern Region tourism zones contained over 30% of the province's fixed-roof accommodations and Northern Region occupancy rates averaged 56%, compared to 62% for Alberta.

S3 Campground visitors by Provincial Park

Total campground visitation in the northern parks has decreased 9% since 1984 while there has been a 12% increase provincially. The 19 provincial parks in the north accounted for 73,444 visitors in 1988.

Highlights

- Cold Lake visits dropped 55% from 1985 to 1988.
- Long Lake increased to over 10,000 visitors in 1988, a 19% increase from 1985.
- The NADC area accounted for almost 17% of the total park visitation in the province in 1988.

S4 Recreation Campgrounds and Sites

In 1987, recreation campgrounds and sites in the NADC area accounted for 31 percent and 26 percent, respectively, of the provincial total.

S5 Interpretive Centre Attendance

The NADC area has two interpretive centres: Historic Dunvegan and Fort McMurray Oilsands. The Fort McMurray centre opened in 1985 and its attendance has increased from 19,834 in 1985 to 68,591 in 1988. Dunvegan opened in 1978 and its attendance has increased from 17,540 to 18,885 in 1988. The combined visitation of the two centres was over 87,000 by 1988, accounting for over 15% of the province's total attendance.

Figure S1

Provincial Parks and Interpretive Facilities in the NADC Area

Figure S2

Interpretive Centres: Number and Attendance

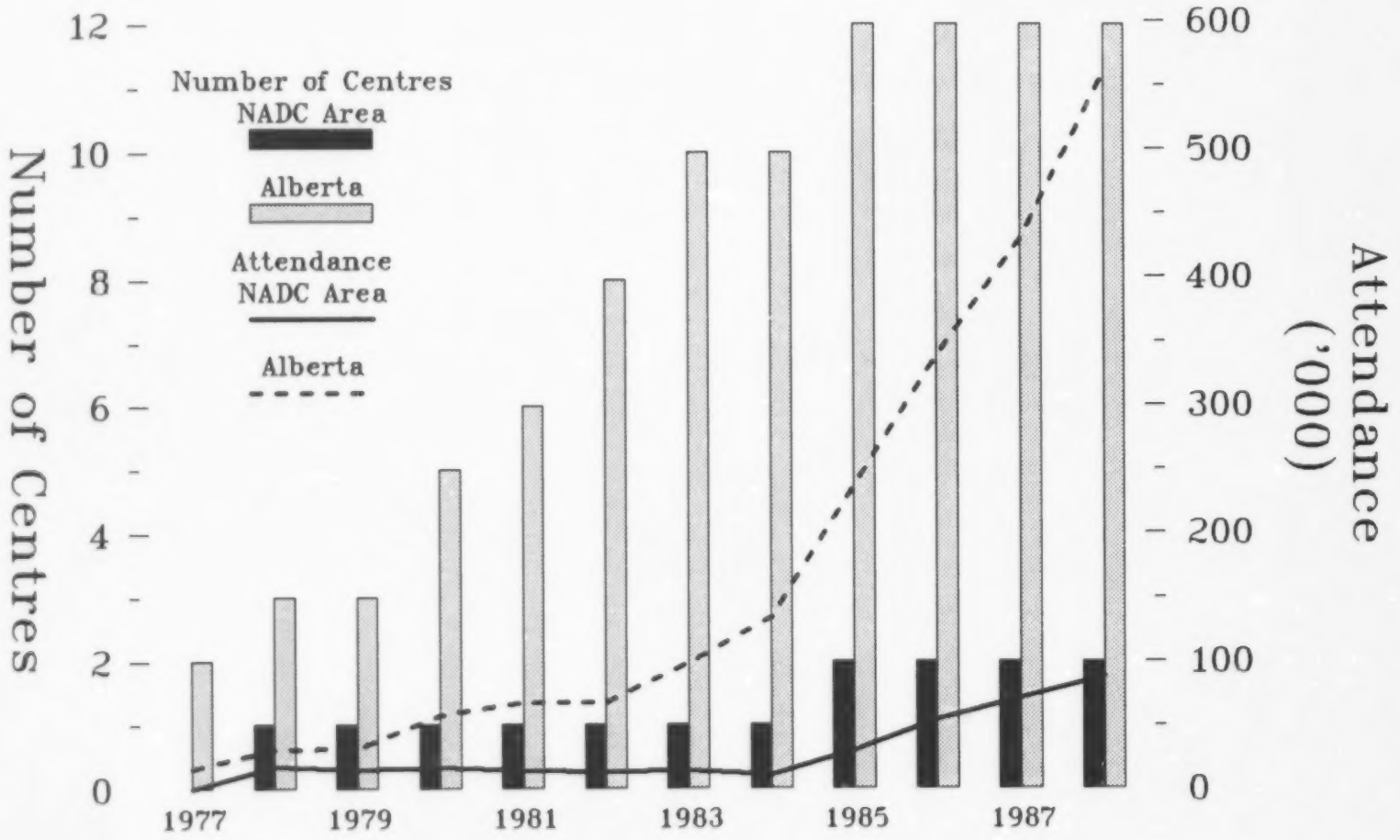


TABLE S1
Estimated Tourist Visitation by Tourism Zone
(Thousands of Person Trips)

	1982	1983	1984	1985	1986	1987	1988
NORTHERN REGION							
Evergreen	675	689	654	676	697	715	712
Game Country	343	349	331	343	353	364	363
Lakeland	1 105	1 122	1 078	1 119	1 146	1 175	1 172
Midnight Twilight	613	614	594	619	637	653	654
Mighty Peace	226	235	219	224	230	239	237
TOTAL	2 962	3 009	2 876	2 981	3 063	3 146	3 138
ANNUAL CHANGE (%)		1.6	-4.4	3.7	2.8	2.7	-0.3
ALBERTA	15 640	15 932	15 236	15 731	16 176	16 709	16 703
ANNUAL CHANGE (%)		1.9	-4.4	3.2	2.8	3.3	0.0
NORTHERN REGION AS % OF ALBERTA	18.9	18.9	18.9	18.9	18.9	18.8	18.8

SOURCE:
- Alberta Tourism

NOTES:
- A person trip consists of one or more nights.
- Tourism zones Evergreen, Midnight Twilight and Lakeland all cross the NADC boundary and data are not adjusted.

TABLE S2
Fixed-roof Accommodation Establishments, Capacity, Occupancy by Tourism Zone

	ESTABLISHMENTS					ROOM NIGHTS AVAILABLE					OCCUPANCY (%)				
	1983	1984	1985	1986	1987	1983	1984	1985	1986	1987	1983	1984	1985	1986	1987
NORTHERN REGION															
Evergreen	52	55	57	NA	55	1 788	1 955	2 148	NA	1 965	51.9	50.1	50.5	NA	48.8
Game Country	33	34	35	NA	33	2 065	2 046	2 043	NA	2 000	38.1	48.0	61.8	NA	57.6
Lakeland	64	65	61	NA	60	2 757	2 795	2 694	NA	2 693	50.0	57.7	63.8	NA	54.2
Midnight Twilight	36	35	31	NA	35	1 145	1 094	1 068	NA	1 206	47.6	56.7	62.3	NA	58.7
Mighty Peace	29	28	21	NA	27	989	982	789	NA	1 039	54.0	58.9	69.3	NA	60.1
TOTAL	214	217	205	NA	210	8 744	8 872	8 742	NA	8 903	48.3	54.3	61.5	NA	55.9
ANNUAL CHANGE (%)		1.4	-5.5	NA	NA		1.5	-1.5	NA	NA		12.3	13.3	NA	NA
ALBERTA	691	697	680	NA	688	40 201	41 162	40 540	NA	42 177	55.5	57.6	61.3	NA	62.3
ANNUAL CHANGE (%)		0.9	-2.4	NA	NA		2.4	-1.5	NA	NA		3.8	6.4	NA	NA
NORTHERN REGION AS % OF ALBERTA	31.0	31.1	30.1	NA	30.5	21.8	21.6	21.6	NA	21.1	87.0	94.3	100.3	NA	89.7

SOURCE:
- Alberta Tourism

NOTES:
- Tourism zones Evergreen, Midnight Twilight and Lakeland all cross the NADC boundary and are not adjusted.
- Occupancy "Totals" are averages.

TABLE S3
Campground Visitors by Provincial Park
(Occupied Campsite Nights)

	1984	1985	1986	1987	1988
NADC AREA					
Cold Lake	4 650	5 550	3 807	2 500	2 487
Garner Lake	2 450	3 344	4 238	3 439	2 201
Gregoire Lake	7 900	7 401	5 091	3 092	2 866
Long Lake	12 465	8 718	4 971	7 970	10 347
Moose Lake	2 825	2 195	2 254	2 421	1 726
Sir Winston Churchill	5 435	5 075	5 465	3 913	4 385
Whitney Lakes	2 045	3 565	2 730	2 324	2 518
Northern Region	43 040	52 798	55 912	51 005	46 914
TOTAL	80 810	88 646	84 468	76 664	73 444
ANNUAL CHANGE (%)		9.7	-4.7	-9.2	-4.2
ALBERTA	391 996	394 875	425 449	437 360	437 368
ANNUAL CHANGE (%)		0.7	7.7	2.8	0.0
NADC AREA AS % OF ALBERTA	20.6	22.4	19.9	17.5	16.8

SOURCE:
- Alberta Recreation and Parks

NOTES:
- Visitation numbers are collected for the peak season: April 1st to September 30th.
- Adjusted data are not available for the parks in the Northern Region so it was provided in aggregate.
- The parks in the Northern Region include: Carson-Pegasus, Cross Lake, Hilliard's Bay, Lesser Slave Lake, Moonshine Lake, Notikewin, O'Brien, Queen Elizabeth, Saskatoon Island, Williamson, Winagami and Young's Point.

TABLE S4
Number of Recreation Campgrounds and Sites in 1987 by Type

	CAMPGROUNDS	SITES
NADC AREA		
Forestry	66	1 570
Transportation	37	635
County Parks	22	729
Municipal Recreation Parks	17	822
Environment	8	175
Private & RV Campgrounds	18	1 418
Provincial Parks	24	2808
Provincial Recreation Areas	51	1 226
TOTAL	243	9 383
ALBERTA		
Forestry	163	4 102
Transportation	101	1 651
County Parks	135	2 884
Municipal Recreation Parks	71	3 038
Environment	18	693
Private & RV Campgrounds	94	9 750
Provincial Parks	79	10548
Provincial Recreation Areas	120	3 906
TOTAL	781	36 572
NADC AREA AS % OF ALBERTA	31.1	25.7

SOURCE:
- Alberta Recreation and Parks

TABLE S5
Interpretive Centres: Number and Attendance

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NADC AREA												
Number of Centres	0	1	1	1	1	1	1	1	2	2	2	2
Attendance												
Historic Dunvegan	0	17 540	15 503	16 564	13 931	13 367	14 674	10 775	10 474	12 351	11 253	18 885
Fort McMurray Oilsands	0	0	0	0	0	0	0	0	19 834	42 213	59 360	68 591
TOTAL	0	17 540	15 503	16 564	13 931	13 367	14 674	10 775	30 308	54 564	70 613	87 476
ANNUAL CHANGE (%)			-11.6	6.8	-15.9	-4.0	9.8	-26.6	181.3	80.0	29.4	23.9
ALBERTA												
Number of Centres	2	3	3	5	6	8	10	10	12	12	12	12
Attendance	15 860	30 840	32 003	57 164	67 440	67 723	97 981	133 696	236 405	339 504	429 986	559 373
ANNUAL CHANGE (%)												
Number of Centres	0.0	50.0	0.0	66.7	20.0	33.3	25.0	0.0	20.0	0.0	0.0	0.0
Attendance	55.9	94.5	3.8	78.6	18.0	0.4	44.7	36.5	76.8	43.6	26.7	30.1
NADC AREA AS % OF ALBERTA												
Sites	0.0	33.3	33.3	20.0	16.7	12.5	10.0	10.0	16.7	16.7	16.7	16.7
Attendance	0.0	56.9	48.4	29.0	20.7	19.7	15.0	8.1	12.8	16.1	16.4	15.6

SOURCE:
- Alberta Culture and Multiculturalism, Historical Resources Historic Sites Service

NOTE:
- There are also a large number of historic sites in the NADC area.

LIST OF SOURCES

Table	Source(s)

SECTION I — Population and Demographics

Population and Area

A1, A2	Census of Canada (1971, 1976, 1981, 1986) Alberta Municipal Affairs for all other years
A3	Census of Canada (1971 to 1986)
A4	Alberta Municipal Affairs, Metis Development Branch
A5	Department of Indian and Northern Affairs, Lands, Revenue and Taxation Branch

Vital Statistics

B1, B2	Census of Canada
B3	Census of Canada (1976, 1981, 1986) *Trends 1971-79* (1971)
B4	1971 Census of Canada, *Religious Denominations*, Catalogue number 92-724 1981 Census of Canada, *Selected Social and Economic Characteristics*, Catalogue number 95-991
B5	Statistics of Canada, Demography Division
B6	Alberta Vital Statistics/Alberta Health, Vital Statistics Information System
B7	Census of Canada, *Internal Migration*, Catalogue numbers 92-719 (1971), 92-828 (1976), 92-907 (1981), 94-118 (1986)

SECTION II — Socio-economic Characteristics

Income and Labor Force

C1	Census of Canada, Catalogue number 12-501
C2	Census of Canada
C3	Revenue Canada
C4	Census of Canada

Education

D1	Alberta Education, Information Services Branch (1988 District Data) *Education in Alberta: A Compendium of Education and Social Statistics*, 1988 Edition (1988 Alberta Totals) *Trends 1971-79* (1971, 1979)
D2	Alberta Advanced Education, Research and Information Support Branch
D3	Athabasca University (1983-88) Alberta Advanced Education (1977-82)
D4	Information made available by Alberta Advanced Education, Research and Information Support Branch
D5	Census of Canada (1981 and 1986) Census of Canada, *General Population, Housing, Household, Family and Labor Force Data*, Catalogue number 95, Vol. 2 (1971) and 3 (1976)
D6	Alberta Advanced Education, Research and Information Support Branch
D7	Alberta Education, French Language Services Branch

Health

E1	Alberta Hospitals and Medical Care, *Annual Report* (1981, 1986) *Trends 1971-79* (1971, 1979)
E2	Alberta Hospitals and Medical Care, Annual Reports
E3	Alberta Health, *Health Economics and Statistics* (1976, 1981, 1986-88) *Trends 1971-79* (1978)

Table	Source(s)

Family and Social Services

F1	Alberta Social Services (1980-88) *Trends 1971-79* (1975-79)
F2	Alberta Social Services (1981-88) *Trends 1971-79* (1971-80)
F3	Alberta Family and Social Services, Child Welfare Services
F4	Alberta Alcohol and Drug Abuse Commission, Community Education Services Information System

Justice

G1	Statistics Canada, *Canadian Crime Statistics*, Catalogue number 85-205
G2	Statistics Canada, *Enforcement Statistics*, Catalogue number 85-205
G3	Alberta Solicitor General, Law Enforcement Division

SECTION III — Infrastructure and Services

Utilities

H1	*Alberta Electric Industry Annual Statistics* (ST-28) Energy Resources Conservation Board (1980-87) *Trends 1971-79* (1971-79)
H2	Alberta Power Ltd. TransAlta Utilities Electric Utilities Planning Commission (EUPC)
H3, H4	Alberta Environment, Water Resources Management Services Planning Division

Housing

I1	Census of Canada
I2	Alberta Municipal Affairs, Market and Economic Analysis
I3	Alberta Municipal Affairs
I4	Canada Mortgage and Housing Corporation, Edmonton Office, Market Analysis Unit

Transportation

J1	Alberta Transportation, Corporate Planning Branch
J2	Alberta Transportation, Construction Programming Branch
J3	Statistics Canada, *Road Motor Vehicles*, Catalogue number 53-219
J4	Canadian Grain Commission, Economics and Statistics Division
J5	Transport Canada, Aviation Statistics Centre (Aircraft Movements)
J6	Statistics Canada, *Air Passenger Origin and Destination Domestic Report*, Catalogue number 51-204

Communications

K1	*Canadian Almanac*
K2	Canadian Daily Newspaper Publishers Association Alberta Weekly Newspapers Association

SECTION IV — Economic Development

Industrial Development

L1, L2	Alberta Economic Development and Trade, Small Business and Industry Division
L3	Alberta Economic Development and Trade, Small Business and Industry Division (1979-81) *Trends 1971-79* (1974-78)

Table	Source(s)

Manufacturing, Retail and Service Trade

M1	Alberta Bureau of Statistics, *Alberta Principal Manufacturing Statistics* (1978-83) *Trends 1971-79* (1971-77)
M2, M3	Statistics Canada, *Manufacturing Industries of Canada: Sub Provincial Areas* (1984, 1985), Catalogue number 31-209 Alberta Bureau of Statistics, *Alberta Principal Manufacturing Statistics* (1978-83) *Trends 1971-79* (1971-77)
M4	Alberta Bureau of Statistics, *Alberta Retail and Service Trade Statistics*
M5	Alberta Bureau of Statistics
M6	Consumer and Corporate Affairs Canada, Bankruptcy Branch

Agriculture

N1, N2	Census of Agriculture (1981, 1986) *Trends 1971-79* (1971, 1976)
N3-N6	Census of Agriculture

Oil and Gas

O1	Alberta Bureau of Statistics, *Industry and Resources, Economic Development and Trade* (1980-85) *Trends 1971-1979* (1971-1979)
O2-O4	ERCB Alberta Crude Oil Reserves
O5	*Alberta Oil Sands Annual Statistics*

Forestry

P1-P3	Forestry, Lands and Wildlife, Timber Management
P4	Alberta Forestry Service, Reforestation Branch

Fishing, Trapping and Wildlife

Q1	Forestry, Lands and Wildlife, Fisheries Management
Q2, Q3	Alberta Fish and Wildlife
Q4	Wildlife Management Department

Mining

R1	*Alberta Coal Industry Annual Statistics*

Tourism, Culture, Recreation and Parks

S1, S2	Alberta Tourism
S3, S4	Alberta Recreation and Parks
S5	Alberta Culture and Multiculturalism, Historical Resources Historic Sites Service